STUDIES

IN

ANCIENT HINDU POLITY

(BASED ON THE ARTHASÂSTRA OF KAUTILYA)



BY

NARENDRA NATH LAW, M.A., B.L.

WITH AN INTRODUCTORY ESSAY ON THE AGE AND AUTHENTICITY OF THE ARTHASASTRA OF KAUTILYA

BY PROF. RADHAKUMUD MOOKERJI, M.A. XEMCHAND ROYCHAND SCHOLAR, AUTHOR OF "A HISTORY OF INDIAN SHIPPING," ETC.

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 Vol. IV. DURING THE NINETEENTH CENTURY AND AFTER.

TO MY FATHER

THE HON. RAJA RESHEE CASE LAW, C.I.E.

THIS SMALL TRIBUTE

OF

GREAT AFFECTION

सत्यमेव जयते



PREFACE

In the present work an attempt is made to describe some of the features and activities of the civil government of the ancient Hindus, as outlined in the Arthasastra of Kautilya. Such an attempt will, I trust, be useful in throwing some light on the secular and practical achievements of the ancient Hindus, as distinguished from the spiritual and intellectual, which latter are more widely studied and appreciated than the former.

I am, however, painfully conscious of the difficulties with which the subject is beset. The quaint and terse language of Kautilya, combined with the technical terms used by him, adds much to the difficulties. The Commentary of Bhattasvâmî is fragmentary and confined only to a portion of the Second

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Book. I should, however, acknowledge my indebtedness to the edition and translation of the work by Mr. R. Shama Sastri, B.A., whose pioneering work has paved the way for the investigations of other scholars.

My deep gratitude is due to Prof. Radhakumud Mookerji, M.A., Premchand Roychand Scholar and author of "A History of Indian Shipping," for valuable help rendered and for the Introduction he has written to this work. I am also thankful to Pundit Jogendranath Tarka-Vedânta-tîrtha and Pundit Vihdusekhar Sastri for their kind assistance, and to my uncle, Mr. Nanda Lal Dey, M.A., B.L., author of the "Geographical Dictionary of Ancient and Mediæval India," for his valuable suggestions. My acknowledgments are likewise due to Mr. Ramananda Chatterji, M.A., editor of the Modern Review, for his courteous permission to reproduce such portions of this work as appeared in his Review, and to Messrs. Surendra Nath Kumar, B.A., and Hiralal Roy, A.B., for their kind assistance; also to my brother Mr. Surendra Nath Law, and to Messrs. Kumud Lal Dey, Nalin Chandra Paul, B.L., Satya Churn Law, M.A., and Moni Mohun Sil, for the help I have received from them.

I am fully conscious of my own limitations and the difficulty of the task before me; and I shall consider my labour amply rewarded if my inadequate performance secures for the subject a proper attention and treatment.

মন্যমন লয়

NARENDRA NATH LAW.

96, Amherst Street, Calcutta. August, 1913.

AN INTRODUCTORY ESSAY ON THE AGE AND AUTHENTICITY OF THE ARTHASÂSTRA OF KAUTILYA.

By PROF. RADHAKUMUD MOOKERJI, M.A., Premchand Roychand Scholar, Author of A History of Indian Shipping, etc.

In response to the request of Mr. Law, I have much pleasure in saying a few words on the probable age of the now famous work, the Arthasâstra of Kautilya, the importance of which for the history of culture can hardly be overestimated. To students of Indian history in particular, an approximate determination of the period to which the Arthasâstra relates itself is a most pressing problem demanding immediate solution, for on that will depend much of the reconstruction of early Indian history, as well as a true interpretation and appreciation of ancient Hindu culture. The Arthasâstra, as will be amply evident from Mr. Law's Studies, is a unique record of the secular and practical activities and achievements of the Hindu genius as distinguished

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from the intellectual and spiritual, of which there is so much evidence in the extant Sanskrit and Pâli literature, and of which so much has been said and written; and a proper study of this most interesting work is well calculated to remove one of the widespread and deep-rooted misconceptions about ancient Hindu civilization, which is supposed to have distinguished itself only in the sphere of thought, and to have miserably failed in that of action.

In the following pages an attempt will be made to summarize the arguments which may be advanced in support of the traditional and widely current view that the *Arthasâstra* of Kauțilya is the work of Chânakya, the Minister of Chandra Gupta, and therefore belongs to the fourth century B.C.

That Kauțilya and Châņakya are names of the same person is well known to students of Sanskrit literature. In fact, Châņakya is known by several names,¹ which are thus

¹ Sankarårya in his Jayamangalațikâ on Kâmandaka refers to the names thus: "विष्णुगुप्ताधेनि सांस्कारिकी संज्ञा, चाणका: कोटिल्य द्ति जन्मभूमि गोच निवन्धने." Bâchaspati Mišra in his नात्पीयी टीका calls Bâtsyâyana, the author of Nyâyaenumerated by Hemachandra in his Abhidhânachintâmani:

> वात्स्यायने मञ्जनागः कुटिलचणकाताजः । द्रामित्तः पत्तिल्लसामी विष्ण्गप्नोऽकुलुच सः ॥

Equally well known is the fact of Chânakya's connexion with the Emperor Chandra Gupta Maurya, with its political consequences. Evidence of this may be derived from a variety of sources. Thus the Vishnupurâna narrates in its prophetic style that "the Brâhmana Kauțilya shall root out the nine Nandas, inaugurating Chandra Gupta in the kingdom."¹ So also the Bhâgavatapurâna has the following: "A Brâhmana will destroy these nine Nandas,

bhâshya, by the name of Pakshilaswâmî. Thus he says: "आध भगवता आचपादेन निः अयसहती शाखे प्रणति पुन्पादिने च भगवता पचि स्वामिना निमपरमवश्चियते यद्धे वार्त्ति-कारमा: " The Vârttika is, of course, the well-known Commentary on the Nyâyabhâshya by Udyotakara, who wrote it in order to overcome the sophistical arguments and mystifying logic of the Buddhists ["जुनार्कि कधाना-निरा-यहेनो: । करिष्यति तस्य मया निवन्ध: ॥"] headed by Dinnâga as explained by Bâchaspati Misra ["जुनार्कि कधानि विद्यान प्रमुत्तय:"]. This statement, by the way, places the age of the Nyâyabhâshya also before that of Buddhist propaganda dating from Asoka.

¹ XXIV, 6-7: '' नवैव तान् नन्दान् कौटिखो ब्राह्मणः समुद्ध-रिष्यति ... कौटिख्य एव चन्द्रगुप्तं राज्येश्भिषेच्यति ।'

who will inaugurate Chandra Gupta as king."1 There are also similar references in the Matsya, Vâyu and Brahmânda Purânas to Kauțilya's bestowal of the sovereignty on Chandra Gupta.² In his Sthavirâvalîcharita, or "Lives of Jaina Patriarchs," Hemachandra gives an account of Chânakya which, though legendary, agrees with the Purânas in making him the extinguisher of Nanda supremacy and supporter of Chandra Gupta. In the Nandisûtra, again, which is a Jaina religious work in Prâkrit language, Chânakya is extolled for the signal success which he achieved as Finance Minister of Chandra Gupta. In the Jaina work Rishimandalaprakaranavritti there is a reference to the alliance of Chânakya with Chandra Gupta, who seized the kingdom by slaving Nanda. Among the Buddhist works recording the same fact may be mentioned Buddhaghosha's Commentary, Samantapasâdikâ, on the Vinaya Pitaka, as well as the Mahâvansatîkâ of Mahâ-

¹ II, i, 11–12: '' नवनन्दान् द्विज्ञ: कच्चित् प्रपन्नानुद्धरिष्यति ... स एव चन्द्रगुप्तं वै द्विजो राज्येऽभिषेद्यति । ''

² '' कौटिख्यः चन्द्रगुप्तंतु तनो राज्येऽभिषेच्यति '' [Matsya] and ''चन्द्रगुप्तं नृपं राज्ये कोटिख्यः खापयिष्यति '' [Vâyu and Brahmåṇda]. nåmasthavira. Kåmandaka [Nitisara] also refers to the overthrow of the Nanda dynasty and the inauguration of Chandra Gupta in a very forcible passage.¹ The same fact, as is well known, has supplied the basis of the drama *Mudrârâkshasa*. Finally, we may refer to the evidence of the *Arthasâstra* itself, as set forth in one of its concluding verses, where it is stated that the *Arthasâstra* is composed by "him who with angry determination rescued (the Brâhmaṇa's) learning and (the Kshatriya's) art, as also the mother-country, from the clutches of the Nanda kings."²

> ¹ यस्याभिचार वच्चेण वच्चचल्लन सेजसः । पपात मूलतः त्रीमान् सुपर्वानन्दपर्वतः ॥ एकाकी मन्त्रशत्त्या यः शत्त्या शक्तिधरोपमः । घाजच्चार नृचन्द्राय चन्द्रगुप्ताय मेदिनीम् ॥ [I, 4–5.]

["Salutation unto one whose fire of energy was like the flash of lightning, and through whose magical powers, that resembled in potency and fury the thunderbolt itself, the widespread, prosperous, powerful, mountain-like dynasty of Nanda was overturned."]

² येन शालं च शलं च नन्दराजगता च भुः । खमर्थेणोद्धतान्याग्ना तेन शालमिदंछतम् ॥

The "rescue of learning" would be either a vain boast or would seem to favour the traditional Indian view, widely current among orthodox Hindu Pandits and scholars, that all the three works, viz. Nyâyabhâshya, Kâmasûtra, and Arthasâstra, which

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So much about the fact of the political association of Kautilya with the Emperor Chandra Gupta. We shall now consider the evidence proving that the fact of Kautilya's authorship of Arthasåstra is well known in Sanskrit literature. The two principal sources of that evidence are (1) the Nitisâra of Kåmandaka and (2) the Dasakumâracharita of Dandî, both of which accept the genuineness of the Arthasâstra as the production of Chânakya. Kâmandaka, at the beginning of his Nîtisâra, says: "Salutation unto the learned Vishnu Gupta, who raised the ambrosia of political science out of the vast ocean of the Arthasâstra. As this science is very much liked by kings, I shall make a brief but clear abridgment of the treatise of that learned scholar who was a

are acknowledged authorities in their respective subjects, had a common author, and that that author was Chânakya. Compare in this connexion the enumeration of Chânakya's names in *Abhidhânachintâmani* quoted above. The boast about "rescue of learning" is also supported by Kâmandaka, who refers to Chânakya's encyclopædic learning in such phrases as "यो वस्व भूवि विद्युत:," "वेद्विद् वर:," "विद्यानां पार्ट्युवः," etc. Another significant fact to be noted in this connexion is the identity of numerous passages in the three works named above, pointing to their common origin. The whole subject, however, deserves a critical investigation.

master of all branches of knowledge."¹ It is hardly necessary for our present purpose to prove by quotations that with Kâmandaka the work of Kautilya was not a mere tradition but an actual masterpiece, which has been throughout his Nîtisâra used as his original authority, even supplying many of his words and phrases. Nay, Kâmandaka has, it may be said, abridged by making omissions: the entire portions of the second, third, fourth and fourteenth Books of the Arthasâstra find no place in the Nîtisâra. Thus the work of Kâmandaka supplies very good evidence to show that the work of Kautilya was a reality. The second piece of evidence bearing on the point is furnished by the Dasakumâracharita of Dandî. In the Somadatta-utpattikathâ [l. 1] there is a reference to both Kautilya and Kâmandaka as authorities on Nîtisâstra,² while in the eighth chapter of Part II occurs the following remarkable reference to Kautilva³:

दर्भगात् तस्य सद्द गी विद्यानां पारदञ्चनः ।

राजविद्या प्रियतया संचित्रग्रन्थमर्थवत् ॥ [I, 7.]

² '' कौटिख-कामन्दकीयादिमीनिपटलकौण्रलं . . ."

1

³ ''... इयमिदानीं चाचार्यविष्णुगुप्तेन मौर्यार्चे षड़भि: स्नोक-सुद्त्वे: संचिप्ता ...''

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"The science of Dandanîti (Politics) has been of late abridged into 6000 slokas by Achâryya Vishnu Gupta for the benefit of the Maurya." The results of a study of that work, difficult as it is, requiring a knowledge of various other sciences, are ironically described by Vihârabhadra (to dissuade his king from its study) in a long passage which bristles with quotations from the Arthasâstra. Thus one of the results is stated to be that the reader will have to gravely decide what quantity of rice will be required to satisfy his appetite1 ["आलकुचेरपि झने तण्डल्लीः इयद्भिः इयानीदनः सम्पद्यते "]; what quantity of fuel will cook a certain quantity of rice² ('' इयत खोदनस्य पाकायण्तावत इत्यनं पर्याप्तमिति मानोन्गा-नपूर्व्वनं देयम्।"]. Next follows a sarcastic enumeration and criticism of the king's daily duties according to Chânakya, which closely follows that of the text before us. Thus the following expressions have been borrowed from the Arthasâstra³:

1 Cf. Arthasâstra, Bk. II, ch. xv, where quantities of food are determined for the higher castes (भार्य), lower castes (भार), for women, and also for children.

² Cf. Arthasiastra, Bk. II, ch. xix: "काछपद्वविंग्रसिपलं तण्ड्लप्रस्थराधनम् !"

³ See the chapter on **TENNUTE:** of the first Book.

" आयथयजातं खहुः प्रथमेऽष्टमे भागे त्रोतथम्"; "दितीये खन्गोऽन्यं विवदमानानां प्रजानां चान्नोग्रैः दह्यमानकर्णः कष्टं जीवति"; "त्वतीये स्नातुं भोक्तुच लभते"; "चतुर्थे हिरप्प-प्रतिग्रहाय इसं प्रसारयन्नेव उत्तिष्ठति"; "पद्यमे मन्तविन्नया महानमायासं खनुभवति ... मिथः सम्भुय दोषगुणो दुतचार-वाक्यानि ... उपजीवन्ति"; "षष्ठे सैरविद्यारः मन्त्रो वा म्रेवः"; "सप्तमे चतुरङ्गवसः प्रत्यवेचण प्रयासः"; "खप्टमे सेनापतिसखस्य विक्रमचिन्नाक्तेशः "; "पुनः उपास्य एव सन्धां प्रथमे राचिविभागे गृढ़ पुरुषाः द्रष्टयाः "; "दितीये भोजनान्तरं त्रोचिय दव स्नाधायं खारहते"; "त्वतीये त्र्यधोषेण संविष्टः"; "खतुर्थपद्यमौ ग्रयीत"; "पुनः षष्ठे ग्रास्तचिन्ना कार्याचिन्ना-रसः "; "सप्तमे मन्त्रयहः द्रातादि प्रेषणानि च "; "खप्टमे पुरोहितादयः खभ्यत्य एनमाझः"।

Thus these borrowings of Daṇḍî from the *Arthasâstra* are a further proof that the work had an actual existence, and that it was the production of Châņakya.

Among other Sanskrit works which also allude to the Kautilîya Arthasâstra may be mentioned the Nandisûtra¹ of the Jainas, the Pañchatantra² and the Nîtivâkyâmrita³ of Somadeva. Lastly, we may refer to the evidence of numerous quotations from Kautilya in Mallinâth's Commentary on Kâlidâsa's

² Ch. i.

³ Edited in the Kâvyamâlâ Series, Bombay.

¹ P. 391, Calcutta ed., quoted in I. A., Jan., 1905, p. 6.

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Raghuvanša and other works.¹ Even Kâlidâsa would appear sometimes to borrow phrases of Kauțilya's book.²

We have now considered the available evidence proving (1) the political connexion of Kauțilya with Emperor Chandra Gupta Maurya, and (2) the existence of the Kauțilîya Arthasâstra as a literary work. It now remains to prove that that work is the production of an individual author and not of a

¹ E.g. Mallinâth on Raghuvania, Sarga 17, sloka 49 : " कौटिखः :---कार्याणां नियोग-विकल्प-सम्चया भवन्ति खनेनेवो-पायेन नान्येनेति नियोगः अनेन अन्येनवेति विवच्धः अनेन चेति सम्चय: इति," which is taken from the Arthasastra, Bk. IX, ch. vii, pr. 147. Ibid., sloka 55: "अन कीटिख:--चीणा: प्रक्ततयो लोभं लुआयानित विरागताम्। विरक्ता यान्यसित्रं वा भत्तीरं घ्रन्ति वा स्वयम," which corresponds to Artha., Bk. VII, ch. v, pr. 108-110. Ibid., sloka 56: " अन कोटिस्य:---समन्या-योभ्यां सन्दधीत चीनेन विग्टज्ञीयात," which corresponds to Artha., Bk. VII, ch. ii, pr. 101-2. Ibid., sloka 76: "HTANH-वीत्साइश्तिभिः परान् सन्दथात् इति कौटिखः," which corresponds to Artha., Bk. VII, ch. xv, pr. 117-120. Ibid., sloka 81: "दुर्वसी वसवत्सेवी वरुद्वाच्छक्तिनादिभिः। वर्त्तेत दन्डोपनतोभर्न्थेवसवस्थितः इति कौटिखः," which corresponds to Artha., ibid. Ibid., Sarga 18, sloka 50: " अव कोटिख:---धमीधमी जयां अधीन यौँ वात्तीयां नयानयी दण्डनीत्यां इति." which corresponds to Artha., Bk. I, ch. i, pr. 1.

² Thus the phrase " चनिष्यस्य वसनेन " of Kumárasambhava, VI, xxxvii, occurs in Bk. II, ch. i; similarly, Raghuvanša, III, xxviii, uses phrases of Kautilya, I, v, 3. school, as is frequently the case with Indian treatises.

Fortunately, the above proposition has been argued at great length and in a quite convincing manner by the learned German orientalist Prof. Jacobi,¹ who successfully combats Hillebrandt's² view that Kautilya is not himself the sole author of the Arthasâstra. Hillebrandt based his view on the inference that the expressions "द्ति कौटिखः" and "नेति कौटिखः," occurring no less than seventy-two times in the text, show that it is not the work of an individual author named Kautilya but of a school. It is, however, forgotten that the use of the first person and the consequent assumption of prominence or self-assertiveness by an author who wants to refute opposite views is always repugnant to Indian feeling, and the other alternative of writing one's own name in that connexion is invariably followed as a piece of literary etiquette in India. Secondly, to say that a work is the production of a school would mean (i) that its alleged author was the founder of

¹ Sitzungsberichte der Königlich Preussischen Akademie der Wissenschaften, xxxviii, 1912, pp. 832–849.

² Das Kautiliyasastra und Verwandtes, Breslau, 1908.

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the school traced to him in which discussions lead to definite conclusions and the creation of a tradition which is handed down from teacher to students, and (ii) that the tradition so created is afterwards embodied in a bookform by later students. None of these assumptions would, however, apply to Kautilya, considering the historical position of the man who, according to unanimous tradition as explained above, played such an important part not only in the foundation of the Maurya empire, but also in its governance as its first Chancellor with his onerous State duties. As Prof. Jacobi well observes : "One can hardly imagine that Bismarck after his day's work should have held a conference with the professors of a college over politics and State administration, and it is hardly less improbable to assume that Kautilya, the Indian Bismarck, should like an ordinary Pandit surround himself with students, teach them the Arthasâstra, and found a school." The fact is, that the book begat the school, and not the school the book.

Nor do Kâmandaka's references to Kauțilya's work prove it to be the production of a school, as may be easily assumed; for Kâmandaka's

mention of Vishņu Gupta, i.e. Kauțilya, as his guru cannot be interpreted in the literal sense of the term so as to point to the origin of the Arthasâstra in a school. This is clear from the character of the *Nîtisâra* as well as from its contents. It is professedly an abridgment [" पंचित्र यन्य "] of the comprehensive work traced to Kautilya, which, though its principal source, is not, however, its only source, and is not also blindly followed. Kâmandaka is not a onesided follower of his master: he refers to the opinions of other राजनियानिदः besides the authority of Kautilya; and there are points of agreement¹ as well as difference² between the two. Besides, Kâmandaka presents only a small part of the Arthasastra and omits those very subjects which have a bearing on actual administration and which give so much value to Kautilya's work; for instance, such subjects as administration, control of trade and professions, justice, etc., as also universal maxims of government. The fact of the matter was that Kâmandaka was no practical statesman. but a Pandit fond of disputation and showing

¹ E.g. classification of knowledge.

² E.g. the theory of the Mandala or political sphere.

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off political wisdom; and the use that he has made of Kautilya's work only strengthens our conviction that the work is not scholastically delivered tradition but bears the stamp of an individual author and his times.

The same conviction is also borne in upon, us by the contents of the *Arthasâstra* itself and its internal evidence, which we shall now proceed to set forth after Prof. Jacobi.

The first piece of internal evidence is furnished by the references of Kautilya to his predecessors, which betray the critical tendency unmistakably suggestive of an individual author. Thus Kautilya mentions his predecessors no less than 114 times-" एनन कोटिल्य दर्शनं" occurring only once - and in all those numerous references Kautilya quotes opinions only to differ from them. This abundance of criticism, opposition and contradiction seems evidently to indicate a strongly marked individuality and a critical personality, and is quite in keeping with the spirit of the concluding verse referred to above about the author's justly claimed services to learning. Further, if Kautilya's work were the production of a

¹ I, x, 6, p. 17.

compiler of his school long after Kautilya's death, would there be any interest in the use of such forms as रान कोटिख: and नेनि कोटिख:, and repeatedly establishing that Kautilya's doctrines differed from those of his predecessors? And, in that case, would also the expression "रान षाचार्या:," as applied to opponents, be used by a late student of Kautilya's school when it would also apply to Kautilya himself as an षाचार्या?

Secondly, we should note the fact that the two greater parts of the Arthasâstra contain no mention of opposite views, viz. pages 69-156 and 197-253 of the book, comprising parts of Books entitled अध्यचप्रचार, जण्डकसोधन, and योगहनं, the last chapter of which treats of the significant subject "What is to happen in cases of imminent vacancy of throne ?" Those parts do not treat the general principles so much as practical regulations in detail, such as administration, control of trade and industry, the police, the budget, and the like, about which scholasticism has no need to trouble itself but which are of the greatest moment to the practical statesman. We accordingly find that in his treatment of those subjects Kautilya does not take

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any opportunity for controversy, and stands there all alone with no previous tradition to consider or criticize. This is also evident from the significance of the word " $\pi \pi \pi \pi$ "¹ in the opening line of the book which refers to the previous $\hat{A}ch\hat{a}ryyas$.

Next, we have to consider how Kautilya alludes to his predecessors. He uses both the plural and the singular number in respect of them, and in the former case he means the school,² and in the latter the *individual author*.³ What is worthy of note is that these sources are mentioned in a definite order ⁴ in several places, which is probably not the chronological order, but rather seems to be the order of merit determined by Kautilya's own estimation, or the order determined by his convenience of discussion. The arranging of the $\hat{A}ch\hat{a}ryyas$ in such an arbitrary order is

'' ध्धिया लाभे पालने च यावन्ति चर्थशास्त्रानि पूर्व्वाचार्यें: प्रस्तापितानि प्रायभस्तानि संहत्य एकमिदमर्थशास्त्रं कृतम्।"

² E.g. सानवाः, बाईस्प्रत्याः, औश्रनसाः, पाराग्रराः, etc.

³ E.g. भारदाज:, विश्वाच:, पिग्रुन:, कौषपदन्त:, वात-व्याधि:, बडदन्तीपुच:, etc.

⁴ E.g. I, vi, 4, pp. 13 ff.:--भरदाज-विशालाच-पराशर-पिश्चन-कोणपदन-वानयाधि-वज्ञदन्नीपुच। The same order is seen on pp. 82 ff., and on pp. 825 ff. possible only to a great master, and not to an ordinary writer of a text-book. It may also be noted in passing that the schools mentioned by Kautilya were not exclusively the schools of चर्यमाज only, but of चर्ममाज, which comprehended political discussion as a subsidiary topic. It seems that the चर्यमाज did not differentiate itself as an independent school or branch of learning before Kautilya.

Fourthly, a careful consideration of the style of the Arthasâstra would also indicate its individual authorship. Broadly speaking, the course of literary development in India embraces three well-marked stages: in the first stage the previously accumulated tradition or discipline undergoes development in and through a school or schools devoted thereto; the second stage is that of the composition of Sûtras, which lead to some siddhântas, or definite formulæ and conclusions, the exposition of which is conducted by the schoc', though the contents receive thereby a fu ther expansion; the third stage is that of the composition of Bhâshyas, which lead to freedom from the control of the schools, and ushers in the stage of individual authorship. Thus,

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while the text-books produced by schools (e.g. the Srauta-Dharma-Grihya-Sûtras) show the style of Sûtras, the works of individual authors (e.g. Yâska's Nirukta, Patañjali's Mahâbhâshya, etc.) bear a different character. They contain dogmatic statements, together with discussion supporting their own views, and the style passes from that of the Sûtras to the style of the Bhâshyas. Similarly, in Kautilya's work there are some parts characterized by the brevity and dogmatism of the Sûtras, while there are other parts in which the author indulges in certain breadth and minuteness of details after the manner of the Bhâshyas. Thus the Arthasâstra partakes of the character of both Sûtra and Bhâshya at the same time, and this is also admitted by the couplet added at the end of the book. viz. :---

> डद्वाविप्रतिपत्तिं वज्ज्ञधा शास्त्रेषु भाष्यकाराणां । स्वयमेव विष्णुगुप्तचकार स्तूचच भाष्यच्च ॥

Hence the style of the work shows that it belongs to the class of literary works which are not the productions of schools but of individual authors.

We shall now discuss the evidence as to

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individual authorship furnished by passages in the book itself. These passages are given below:—

- तुखयद्दणविज्ञेयं तत्त्वार्थपदनिखितम् ।
 कौटिखेन कत्तं शाखं विमुत्तःग्रन्थविखरम् ॥ [I, i.]
- (2) सर्वभास्ताखनुक्रम्य प्रयोगनुपलम्य च। कौटित्वेन नरेन्द्रार्थे शासनस्य विधिःकृतः॥ [II, x.]
- (3) रवं शास्त्रमिदं युक्तं रताभिस्तन्त्रयुक्तिभिः । अवाप्ती पालने चोक्तं स्रोकस्थास्त्र परस्य च ॥ [XV, i.]
- (4) धर्म्समर्थं च कामं च प्रवर्त्तयति पाति च । चधर्म्सानर्थविद्वेषानिदं शास्त्रं निइन्ति च ॥ [Ibid.]
- (5) येन शास्तं च गर्स्तं च नन्दराजगता च भूः। असमें पोद्धतान्याग्ना तेन शास्त्रसिदं झतम्॥ [Ibid.]

The suggestion that all these passages might have been later additions to the text cannot stand, because, as pointed out by Prof. Jacobi, "if they are taken out, then the customary metrical conclusion will be wanting in the chapters concerned." They may therefore be taken to be integral parts of the text.

In the first passage the expression "सुखयदण रिजेयं," as pointed out by Prof. Jacobi, is a clear indication of individual authorship, for "so speaks the author of a text-book meant

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for self-instruction," for individual learners, and not for the school, for a Sûtra need not be दुखपचणविज्ञेष, because for its understanding the teacher has to look to the school. This inference is also in keeping with the meaning of the opening words of our text, viz. " श्रीयवा जामे पाचने च यावन्यर्थभाषाणि पूर्व्याचार्थे: प्रखापितानि प्रायम-पानि पंद्धत्येकपिदमर्थभाषां इतम्।" Here there is a reference to individual authors, the earlier masters, and not to school traditions or schools, as must have been the case had the work of Kauțilya been the product of a school.

The same contention is again supported by the second passage, which refers to practical administration and regulations [MIGHIGATE] which are above scholastic wisdom. Here Kautilya claims special merit for his work, for these matters had not been sufficiently handled by previous masters. The personal note of the passage is also unmistakable, for would a mere "school compiler" have thus boasted of laying down regulations for guidance of emperors?

Of the next three passages, the first passage relates itself to the opening words of the text, the second promises the attainment of $f = \pi \pi^3$ as

the end of the Arthasâstra, while the last verse indicates who the author is, not by mentioning his name, which had already appeared twice, but by enumerating his virtues or achievements with incomparably forcible brevity. This is not the language of vain self-glorification, but of one who speaks self-possessed from the height of human fame. But, as Prof. Jacobi well observes, in spite of the selfconsciousness undiluted by any sham modesty, one still perceives in the words of Chandra Gupta's Chancellor a courtly discretion which omits to mention the name of his master whom he had raised to the throne, for in that connexion it would have been supremely indecorous. This graceful self-restraint, this aristocratic reserve, is very significant and well worthy of the man and his position in life. It is only a later author, untrammelled by such discretion or restraint, who can unreservedly mention the name of Emperor Chandra Gupta in connexion with the eulogy of Kautilya as Kâmandaka, for instance, has done in the passage quoted above.1 Lastly, the full significance of the phrase "अमर्षेष जरत" has to be noted.

¹ See p. xiii above.

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When applied to learning, it shows Kautilya's impatience of the narrowness and shallowness of his predecessors, which irritated him into activity, and is also an expression of the contempt of the Statesman for the Professor—of which Bismarck, for instance, made no concealment—a contempt which manifests itself throughout the book in the frequent references to the $\hat{A}ch\hat{a}ryyas$ and their doctrinairisms and the refutation of their teachings, and also in the necessity he felt for treatment of important topics omitted by previous masters but indispensable in a useful hand-book of Politics.

We have now considered the internal evidence of the book itself, which proves its genuineness as the production of Kautilya. The suspicion which has gathered round the work is due to the fact that literary forgeries have been very common in India, and individual authorship very rare. It is, however, forgotten that these forgeries invariably connect themselves with divine names, with gods and *rishis*, or the *gurus*, *e.g.* books which passed under the names of Manu, Yâjñavalkya, Vyâsa and the like. But a literary adulteration in respect of a historical personality supported by careful correspondence to the special features of the original (like the Letters of Phalaris, for example) is a refined imposture unheard of in India, and totally foreign to her soil. There is also another kind of literary practice in India which involves false naming of authors, and is frequently resorted to in cases where the author does not like to mention his own name but mentions instead that of his patron who brought about the composition of the work, e.g. the works going under the name of Bhoja, King of Dhârâ. Such a genesis, however, cannot apply to the work of Kautilya, wherein the author attributes to himself the merits of the work. It can, of course, hardly be denied that Kautilya must have had coworkers in many parts of his book, especially those which treat of technical details. Public officers of State in charge of the several departments of administration must have supplied to him materials which Kautilya has only edited; but this fact of itself does not vitiate the genuineness of the book as the production of Kautilya.

The universal reverence attaching to epochmaking masterpieces preserves them against

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the ravages of time and interpolators alike. They never get antiquated, but they become canonical. So has been preserved through centuries Yâska's Nirukta as well as Patañjali's Mahâbhâshya. This is also true of the Kautilîya Arthasâstra, which has further preserved itself by the numbering of its $\pi\pi\tau\pi$'s and the sketching of its contents. Thus the suspicion against the genuineness of the work is unfounded, while the unanimous Indian tradition according to which the Arthasâstra is the work of the famous Minister of Chandra Gupta is confirmed most decisively, as we have already seen, by a series of internal reasons furnished by the book itself.

In this connexion I should like to draw pointed attention to a few other passages in the text which, to my mind, contain indirect allusions and veiled references to the Emperor Chandra Gupta in respect of whom the Artha- $\dot{s}astra$ has carefully avoided any direct reference for reasons already explained, and which will no doubt be found to supply additional and valuable links in the chain of reasoning by which we are supporting our thesis that the book is a genuine production of the Minister of Chandra Gupta. These passages are as follows :----

- (1) खपणीतो चि [दण्डः] मान्स्यन्यायमुद्भावयति । वली-यानयलं चि यसते दण्डधराभावे । तेन गुप्तः प्रभवति । [I, iv, 1.]
- (2) विद्याविनीतो राजा दि प्रजानां विनये रत: । अनन्यां ध्रियवीं भुङ्ते सर्व्वभूतदिते रत: । [I, v, 2.]
- (3) तद्विरद्वष्टत्तिरवश्चेन्द्रियचातुरकोशीय राजा सद्यो वि-नभाति । [I, v, 3.]
- (4) देश: ष्टिथिवी; तस्त्रां चिभवन्समुद्राग्तरमुदी चीनं योजनसङ्खपरिसाणं अतिर्थंक् <u>चक्रवर्तिंचेवम्</u>। [I, ix, 135-6.]

The first of these passages easily lends itself to the interpretation that Kautilya seeks to justify his action in connexion with the usurpation of the throne by Chandra Gupta, whose strong and righteous administration [ययाचंदपः and सुनिज्ञान प्रणोतो दणः] abolished the anarchy and misrule due to the profligacy and unpopularity of the previous Nanda king, who was unable to discharge the primary functions of government, viz. the protection of the weak against the strong [अप्रणोनो दि मान्स्यन्यायमुद्धाययनि, etc.]; "नेन गुन्न: प्रभवनि " would thus mean "for this reason—the abolition of anarchy and

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inauguration of order-does nn, i.e. Chandra Gupta,¹ rise and flourish." This is in all probability the hidden meaning of the passage, though its obvious and superficial sense, drawn from the grammar and context, is different from that suggested. The other three passages have also, to my mind, a common veiled reference to the paramount sovereignty established over the whole of India from the Himalayas to the sea [चिमवत्- चमुद्रानारं, etc.], up to its boundaries in the four directions [चातुरनोर्डीय राजा], by Chandra Gupta, who reigns as the Lord Paramount, Chakravarttî, with none to dispute his rights or share the empire with him [चनन्यां प्रथिवीं सुङ्क्ते ।]. Thus, though there are no direct allusions in the Arthasâstra to the sovereignty of Chandra Gupta which might connect it with his times, these indirect and veiled references are, in my opinion, a sufficient compensation for that supposed defect, and they well suit the work of a consummate politician like Chânakya, who knew very well what to express and what to suppress in writing about contemporary politics.

¹ I owe this suggestion to Mr. K. P. Jayaswal, M.A. (Oxon), Bar.-at-law. I am also deeply indebted to Dr. Brajendranath Seal, M.A., Ph.D., for his many invaluable criticisms and suggestions, and to Mr. Law for material assistance. And read between the lines, the Arthasâstra will be found to throw out sure and sufficient hints as to the age of its production.

Before I conclude, I should not pass over one other matter of importance in this connexion, viz. the striking correspondence between parts or passages of the Arthasâstra and the accounts of India traced to Megasthenes relating to the period of Chandra Gupta. Such correspondence of the Arthasâstra with a definitely dated document is no doubt of great help in fixing its age. A close study of both will show that the Book of Arthasâstra entitled WWWW of Indian administration of which only a partial view can be obtained from the observations of Megasthenes [Frag. xxxiv]. This may be indicated as follows :—

1. "Of the great officers of State, some have charge of the market, others of the city, others of the soldiers." This corresponds to the **ufauran** of the Arthasâstra, under whom were such officers as **uunum**, **uumum** and the like, who looked after commercial matters, the **anafem** or city magistrate charged with the municipal administration and policing of the city, and

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lastly such officers as मानभ्रज, पत्यभ्रज, चेनापति, etc., who were in charge of the military.

2. "Some superintend the rivers, measure the land . . . and inspect the sluices by which water is let out from the main canals into their branches." Kautilya also mentions provisions for irrigation under the Superintendent of the Admiralty [नावधाय] for inspection of rivers and watercourses. He also refers to canals and sluices, as in the passage "चेतुभ्योम् चतस्तीयमपारेषट्पणोदमः," etc. [Bk. III, ch. x, 61], and mentions four modes of irrigation, viz. irrigation by hand [चसप्रावर्गिम], by water carried on shoulders [खान्धप्रावर्त्तिम], by mechanical contrivances [चोन-यन्त्रप्रावर्त्तिम], and by water from tanks, wells and rivers [नदीपरखटाककूपोहाटम]. In the following passage, "वातप्रहर्त्तिनन्दिनिन्द्रायतनतटाककेदारारास-षखवापानां . . ." there is perhaps a reference to the raising of water from wells and tanks by bullocks, and also to devices worked by windpower, i.e. windmills.

As regards officers who "measure the land," a reference may be made to duties of officers called गोप, खानिक, etc., in the *Arthasâstra*, who were entrusted with the very same duties [Bk. II, xxxv, 54-55]. 3. "The same persons have also charge of the huntsmen . . ." In the Arthasâstra hunters were placed under the immediate control of an officer called निवीनाध्यज, the Superintendent of Pastures, whose duties are set forth in detail [Bk. II, xxiii, 52-53].

4. "They collect the taxes and superintend the occupations . ." In the Arthasâstra there is a detailed account of the arrangements for the collection of taxes or revenue. The chief responsible officer was the $\forall \pi i \in \pi^{\dagger}$, under whom were the heads of several departments who collected the revenue for which they were responsible and sent it on to the $\forall \pi i \in \pi^{\dagger}$ [II, vi, 24].

5. "They construct roads . . ." This was done under the superintendence of the चमाइनी [ibid.].

6. "The members of the first body look after everything relating to the industrial arts." The Arthasâstra also [IV, i, 76] speaks of the State supervision of industries, so as to secure proper observance by artizans of rules governing the preparation or manufacture of products [IV, i, 76].

7. "The third body consists of those who inquire when and how births and deaths occur,

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with the view not only of levying a tax, but also in order that births and deaths . . . may not escape the cognizance of Government." The Arthasâstra also gives details of census operations carried on by officers termed unfam, inu, etc. [see II, xxxiv, 54-55, and xxxvi, 56].

8. "The fourth class superintends trade and commerce. Its members have charge of weights and measures, and see that the products in their season are sold by public notice." The officer termed \overline{v} with \overline{v} in the Arthasâstra had also to detect false weights, measures and balances, and check the sale of adulterated goods and of inferior goods passed as superior [see chapter on \overline{v} at \overline{v} at \overline{v} . He also regulated sales.

Similarly, Megasthenes' account of the organization of the War Office, with its six divisions, corresponds very well with what Kautilya says about the officers termed नावधव, वायव, बस्तधव, रवाधव, पेनापनि, etc. His account of "the seven castes among the Indians," also, will be found on • a closer analysis to correspond to the duties of the four traditional castes as laid down in the Arthasâstra [see p. 7, I, i, 1]. Among other minor correspondences may be mentioned Megasthenes'

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reference to elephants turning the scale of victory, which is to be compared with Kautilya's standing विजयो राज्ञाम् [II, ii, 20]; his reference to "exercising the body by friction" is supported by the duties of the संवाहक, as mentioned in the chapter on चात्रात्तितनम् [Bk. I]; that about "the care of the king's person being entrusted to women" is supported by the chapters on आवारचितकम [Bk. I] and गणिकाध्यच [Bk. II]. His observation that "the king may not sleep during the day-time" is supported by the account of the king's daily duties in chapter राजप्रणिः [Bk. I]; that about "the guard of armed women" by Chânakya's स्तीगर्यः धन्विभिः of chapter आसरचिननं [Bk. I]; that about "enclosures" for the king's hunting may be compared with मगवन विचारार्थ राज्ञः कारयेन as referred to in the chapter भूमिच्चिद्रविधानं [Bk. II]. The reference about the king's processions being very well guarded finds its parallel in what Kautilya says about them towards the end of the chapter on भावारचितवन.¹ Women attendants of the king, on chariots, as mentioned by Megasthenes, are also mentioned by Kautilya in his chapter on

¹ '' निर्यापेऽभियाने च राजमार्गमुभयतः झतारचं दण्डिभिर-पासग्रस्नचसप्रप्तजितवाक्रंगच्छेत् . . ."

गणिकाध्यच: [Bk. II]. The reference about "houses being left unguarded" as contained in Megasthenes is perhaps connected with the custom mentioned in the Arthasâstra of leaving some parts of every house [" अग्निक्रहनशालयो "] open for all [III, viii, 61]. The mention by Megasthenes of the marriage dowry of "a yoke' of oxen " corresponds to Kautilya's गोमिशुनादाना-दार्भ: [III, ii, 59]. The practice of the Admiralty "letting out ships on hire for transport of passengers and merchandise" is also referred to in the chapter on नावधात्र. Overseers as a class of officials as mentioned by Megasthenes correspond to the châras of the Arthasâstra about whom so much has been said in its several chapters. Megasthenes' reference to horses and elephants with persons specially "appointed to take care of them" is amply borne out by the chapters अभाषत and इस्त्यधच as indicated above. The reference of Megasthenes to the Royal Road from east to west is corroborated by the accounts of roads in the Arthasâstra [VII, xii, 116] in which roads leading to the Himalayas [इमवतः] and to the west [पूर्व्वपश्चिमस वणिकपथः] are specifically mentioned. The precautions against fire as detailed in the Arthasâstra [II,

xxxvi, 56, and IV, ii, 78], where ten different remedies are laid down [द्रम्यूजीपंपच] for universal use of householders, as also the municipal regulations by virtue of which, in all the principal roads of a city and in front of royal buildings, vessels filled with water were kept; which forbade building straw houses in the city, and confined those who worked with fire, *e.g.* blacksmiths, to isolated parts of the city: all these have really a reference to the wooden architecture prevalent in the period as indicated in the chapter on दुर्गावधानं [Bk. II] and also mentioned by Megasthenes [Frag. xxvi].

Lastly, the testimony of Megasthenes to the high degree of development which material civilization attained in India is abundantly supported by the detailed information furnished by the Arthasâstra on the subject. It would take too much space, and is hardly necessary, to prove by quotations the truth of Megasthenes' remarks [Frag. i] that the Indians are "well skilled in the arts," and "while the soil bears on its surface all kinds of fruits which are known to cultivation, it has also underground numerous veins of all sorts of metals . . . which are employed in making articles of use and ornament, as well as the implements and accoutrements of war." The $Arthas\hat{a}stra$ is a sort of running commentary on the above statements, as will be evident from Mr. Law's *Studies*, and from most of the chapters of the second Book of the *Artha* $s\hat{a}stra$, entitled **WWWWW**.

In conclusion, I should also note that some of the technical and peculiar words ot the Arthasâstra which were current in its times have been used in the Edicts of Asoka which, according to the theory discussed here, belong to a later age. These are: युगा [Rock Ed. III], equivalent to umr: of Kautilya (p. 57); राज्यका [R. Ed. III], corresponding to रज्यक in चोररज्जुक of Kautilya (p. 232); पायखेषु [R. Ed. V, etc.], which occurs in Kautilya (p. 144 and elsewhere); समाज [R. Ed. I], which corresponds to चमाज in the phrase जन्त्वनमाज of Kautilya (p. 121); मञ्चामाता [R. Ed. XII], which is equivalent to मचामाच of Kautilya (p. 58 and elsewhere), and the like. Among the institutions which are referred to both in Kautilya and the Edicts may be mentioned (1) the exemption from slaughter of certain animals and birds specially mentioned both in the Edicts and the Arthasâstra, e.g. जलवाक, ग्रांक, शारिका, इंग, दाखुर, etc. [R. Ed. V, and Kautilya, p. 122]; (2) the zenana system, or the seclusion of women, which is indicated by the word चोग्रोयने, [R. Ed. V], and is also referred to in Kautilya (p. 147) in the words "जीपाननिक्काणिनीनान," and also in the chapter सवाधन of Book II; (3) the planting of medicinal herbs, and fruit-trees along roads, as also the digging of wells as works of public utility, which are mentioned both in the Edicts [e.g. R. Ed. II and Pillar Ed. VII] and Kautilya (p. 56 and elsewhere).

We have now considered the various arguments which may be advanced to support the authenticity of the Arthasâstra as the production of Kauțilya, the Minister of Chandra Gupta. Its age thus ascertained, it is difficult to overestimate its importance for the history of culture, and especially Indian culture. As an exposition of an ancient polity it takes its place by the side of the other ancient compilations such as the Babylonish Code of Hammurabi and the works on Greek politics such as those of Aristotle and Plato. The Code of Hammurabi, however, only treats of practical re-

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gulations appropriate to a mercantile civilization, which are not parts of any system of polity, while both Aristotle's Politics and Plato's Republic go to the other extreme of treating only of the theory of the State and Constitution. In the Arthasâstra we find a combination of theory and practice, principles of government, as well as administrative details and regulations, treated with a touch of refreshing realism which is born only of a living experience of actual problems and contact with facts. The system of polity as revealed in the Arthasâstra is complete in all aspects and details, and exhibits those features which are characteristic of India. Agriculture and commerce, arts and crafts for which India is ever noted, receive their due treatment and emphasis in the book; forests and mines, irrigation and famine, land revenue, census, central and municipal government, cattle and livestock, are the eternal topics of Indian administration, conditioned, as every government is, by its natural and historical environment. And when we find that all these familiar problems have been treated in the Arthasâstraproblems which are still exercising the British

Government of India at the present day—we cannot but discover the operation of an evolutionary process which is ultimately governing the development of Indian administration through Hindu, Mahomedan and modern times.

RADHAKUMUD MOOKERJI.





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STUDIES IN

ANCIENT HINDU POLITY.

CHAPTER I.

PRELIMINARY. MINING. IRRIGATION. METEOROLOGY.

§ 1: Preliminary.—The Arthasâstra of Kautilya, which has been recently edited and published by Mr. R. Shama Sastri, possesses a great interest and importance not only to students of Sanskrit literature, but also to students of Indian history. It throws a flood of light on the material, social and political condition of the ancient Hindus during the third and fourth centuries before the Christian era. It is in fact a unique record of the secular aspects or developments of Indian civilization in that brilliant period of Indian history—the Age of Chandra Gupta. For informatior regarding this period or the sources of its history,

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we had hitherto unfortunately to depend mainly upon the meagre accounts left by Greek writers whose interest in India was first roused by the invasion of Alexander. This work of Kauilya, however, removes to a great extent our want in this direction by opening up a mine of information which is as full as it is reliable.

I therefore propose to utilize this work, in a number of chapters, as a source of information regarding the aforesaid period.

One of the most striking features of Chandra Gupta's government revealed by the Arthasastra is that it achieved many triumphs in peace which were no less than those of war in fact, Chandra Gupta was as well known for the numerical strength and the efficiency of his army and the organization of his war office as for those regulations and institutions which ensure the material welfare of a country. In the present chapter I shall refer to some of the most prominent works and institutions of public utility of his time, which are definitely indicated by passages in the Arthasastra.

There can be little doubt that the department of public works in the government of Chandra Gupta was fairly well organized, with its scope and functions clearly defined. The area of its activity was quite extensive, and included among other things the working of mines, the opening of irrigation works, the establishment of factories : the maintenance of preserves and grazing grounds, of highways of commerce, waterways, land-routes, and other facilities for communication : the establishment of markets and stores: the construction of embankments, dams and bridges; the planting of fruit and flower trees, of medicinal plants and herbs (i.e. the establishment of Ayurvedic and pharmaceutical gardens); and lastly, the State protection of the disabled, the helpless and the infirm. and also of the lower animals, thus anticipating some of the tendencies of modern legislation. I quote below some of the passages which contain references to these works and institutions :---

 (i) आकरकर्मान्तद्रयद्तसिवनव्रजवण्डिक्पथप्रचारान् वारि-स्रिलपथपप्रपानानि च निवेग्रयेत्।

-Bk. II, जनपदनिवेशः, p. 47.

- (ii) चेतुवअयोरणाडार्य्योदकान् सडोदकः त्रेयान् ।
 —Bk. VII, कर्मासत्रिः, p. 297.
- (iii) एवं द्रवं द्विपवनं मे तुब असणाकरान्
 रचेत् पूर्म्छतान् राजा नवांचामिप्रवर्भयेत् ।
 ----Bk, II, जनपदनिवेगः, p. 49.

B 2

(iv) जनरपश्चिमभागं पश्चमेषव्यस्हं। ---Bk. II, दुर्गनिवेगः, p. 55.

(v) सद्दोदकमाद्वार्यादकम् वा सेतुं बन्धयेत्। खन्धेषां वा बभ्रतां भूमिमार्ग्रद्वोपकरणानुग्रदं कुर्यात्। ----Bk. II, जनपदनिवेग्रः, p. 47.

(vi) प्रथाश्वर्भसीयं महामात्रीयं, विभक्तकीपुरुषस्थानमवसारतः सुगुप्तकच्यं वन्धनागारं कार्र्येत् । ----Bk, II, सन्निधाष्टचेयकर्मं, p. 58.

(vii) भिषभीषच्यागारात् आखादविग्राइभेषजं ग्टडीला पाचक-पोषकाभ्यासाताना च प्रतिस्थाद्य राज्ञे प्रयच्छेत्। ---Bk. I, आतारचितकन्, p. 44.

(viii) गत्वभेषच्योगीर डीरवेर पिप्डालुकादीनां यद्यासं भूमिषु च स्तात्यांच खनूष्याचीपधीत्यापधेन्। --Bk. II, सीसाऽध्यचः, p. 117.

(ix) चेतुं वनं क्रजं वर्षिकपथं चावेचेत । ---Bk. II, समाइर्तुसमुद्यप्रस्थापनम्, p. 59.

(xi) त्रधः प्राचीना राजमार्गास्तय उदीचीनाः । चतुर्दखामरा रथ्या राजमार्ग-द्रोणसुख-स्थानीय-राष्ट्र-विवीतपथाः ।

सथोनीय-थुइभ्राशान-पासू-पथास्थट-द्ष्डाः । चतुर्द्खस्तेतुवनपथः । द्विद्खोहस्तिचेचपथः । पद्यारत्वयो रथपथस्तारः पद्मपथः । दौ चुद्रपद्मसनुष्यपथः । —Bk. II, द्रांगिनेगः, pp. 54, 55. § 2: Mining.—Let us first turn to the working of mines. The only two passages in Megasthenes that are worthy of note in this connexion are :—

"And while the soil bears on its surface all kinds of fruits which are known to cultivation, it has also underground numerous veins of all sorts of metals, for it contains much gold and silver, and copper and iron in no small quantity, and even tin and other metals which are employed in making articles of use and ornament as well as the implements and accoutrements of war."—Book I, Fragment i.

The second passage is :---

"The robes are worked in gold and ornamented with precious stones, and they wear also flowered garments made of the finest muslin."--Book II, Fragment xxvii.

These passages show, no doubt, that there were extensive mining operations in those days, but do not satisfy our curiosity as to their details. The Arthasastra, however, does this. According to it, there were two classes of mines, viz. (i) ocean mines and (ii) land mines, and expert superintendents were appointed in charge of each class. The duty of the superintendent[•] of ocean mines was to look after the collection of diamonds and other precious stones, pearls, corals, conch-shells and salt. The regulation of the trade in these articles was also one of his duties. It may be noted in passing that ocean mining unquestionably indicates great progress in the art of navigation and shipbuilding, which will be dealt with hereafter.

A scientific expert was appointed to the post of superintendent of land mines. In the first place, he had to perform the difficult work of prospecting and discovering new mines on plains and mountain slopes. He had to examine and infer from slags, ashes and other such indications whether a mine had been exhausted or not. This department was manned by several other experts, as also by mining labourers. It was also equipped with the necessary scientific apparata.

The superintendent was guided in his work of prospecting by his knowledge of the signs and properties of the mineral ores. He had to pay particular attention to the depth of colour, weight, smell, taste, oiliness, adhesiveness, power of amalgamating with particular metals, and several other mechanical and chemical properties of the ores, in order to ascertain the nature and richness of a mine. We find in the Arthasastra the properties of several metals classified, and the large number and variety of

them necessarily lead one to the conclusion that mining reached a stage far above the rudimentary, and that the persons who devoted their attention to it possessed no small power of discrimination. As an illustration¹ I quote below the passage which enumerates the signs of the different kinds of silver ores. It says that the silver ores are those which have the colours of प्राङ्घ, कर्पूर, स्कटिक, नवनीत, कपोन, पारायत, विमलक, मयूरपीवा; of च स्वक, गोमेदक, गुड़ मत्स्यण्डिका; of कोविदार, पद्म, पाटली, कलाथ, चौमपुष्य, चातसीपुष्य; which are found in combination with सीस, आधन, are विच (smelling of raw meat), भिन्न, खेताभ, झण्, ज्ञच्याम, चेन and लेखाबिन्दुचित्र; do not split, and emit much foam and smoke. Similarly, we find mentioned the properties of the ores of gold, float-gold, bitumen, copper,² lead,³ tin,

¹ श्रक्ष-कपूर-स्फटिक-नवनीत-कपोत-पारायत-विसज्ञक-मयूरपीवावर्णाः । सद्यक-गोसेदक-गुड्-सत्स्यण्डिकावर्णाः । कोवि-दार पद्मपाटलीकलाय चौमातसीपुष्यवर्णाः । ससीसाः साझनाः विचा भिद्वाः खेताभाः छष्णाः छप्णभाः खेताः सर्वे या लेखाविण्टु-चिचा सृद्वो भाषमाना न स्फुटन्नि वड्ठफेषधूमाच रूप्यधातवः । —Bk. ¶, चाकरकर्मान्नप्रवर्तनम्, p. 82.

² Ores of copper -- भारिकम्स्तिग्धो मृदुख प्रसरघातुर्भूमि-भागो वा पिङ्गलो चरित: पाठलो लोडितो वा ताम्रधातुः। Ibid., p. 83.

^अ Ores of lead— काकमेचक: कपोतरोचनावर्ष: चेतरात्नको वा विसर्सोक्षधातु: । Ibid. iron, etc. It is apparent from this that the classification is an elaborate one, and the industry in Chandra Gupta's time reached an advanced stage.

When the superintendent discovered a new mine, he intimated it to Government, stating at the same time the nature of its contents. The Government had to decide whether it would work the mine directly or lease it out to private persons. It was only in the case of those mines that required a large outlay to work them that Government leased them out.

The purification of the ores during the actual exploitation of the mines is an interesting study. The metals were purified by treating them with ingredients most of which were organic. The passage¹ quoted below enumerates these ingredients: नीच्छ, urine, alkalies, राजटच, बट, पोछ, cow's bile, urine and dung of buffalo, etc. Again, metals were made permanently or temporarily malleable

े तेषाम् (धातूनाम्) चग्नडा सूढ़गभा या तीच्छमूवचारभा-विता राजष्टचयटपोलुगोपिंगरोचना सडिव-खरकरटसूच-ज्ञख-पिण्डेप्रकालन-प्रतीवापासदयखेपा या विग्नडास्**यवन्ति ।** ---Ibid., p. 82. by chemically treating them with several ingredients, e.g. ashes of $\mathbf{u}\mathbf{v}$, $\mathbf{n}\mathbf{i}\mathbf{v}$, $\mathbf{f}\mathbf{n}\mathbf{w}$, honey, sheep's milk, clarified butter, powder of cow's teeth and horn.¹ The passage bearing on this point asserts that even if a metal splits into a hundred thousand parts it can be rendered malleable by the prescribed methods. These methods, however, appear to us to be novel, and are quite different from what a metallurgist of the present day would use. But nevertheless they were of service in their day.

After the metals had been purified, the superintendents who looked after the manufacture of articles from the metals took charge of them. There were several such superintendents, e.g. a superintendent of gold (स्वर्णाधवः) for manufacturing ornaments from gold; a superintendent of the inferior metals (जोदाधवः). viz. copper, lead, tin, bell-metal, ताज and जोध, to manufacture commodities from them; a superintendent of the armoury (षाषुषाधवः), one of whose duties.was to look after the

manufacture of metal weapons; a superintendent of the mint (जचपाधवः) for minting coins from gold, silver, copper, etc.; a superintendent of the treasury (कोसाधवः), one of whose principal duties was to look after the formation of ornaments of precious stones such as necklaces and bracelets. Commerce in the manufactured metal articles was in the hands of Government. There was a separate superintendent to look after and regulate commerce in salt (जवपाधवः).

There were regulations for the departments of the superintendents; but leaving them for the present, let us turn to the different kinds of rates that were levied from mines.¹ These were, as the passage quoted below shows— (1) सूख, (2) विभाग, (3) व्याजी, (4) परिष, (5) खत्यय, (6) ग्रास्क, (7) वैधरण, (8) दख, (9) रूप and (10) रूपिक.

Before leaving the subject of mines, it should be noted that in Bk. IV, वाक्यकमानुयोगः, there is a passage which lays down the punishment for a Brâhman who has committed a heinous offence, viz., that though he must not be tortured in any case, his property may be

🔫 मूर्त्यं विभागं च याजीं परिघन त्यथन् द्रार्क्तं वैधरणं दण्डं रूपं रूपिकनेव च। Ibid., p. 85.

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confiscated or he may be condemned to the mines.¹ This resembles the punishment inflicted in Rome on criminals for an offence of the grosser sort.

§ 3: Irrigation.—We now turn to the next point, viz. irrigation. That there was an elaborate system of irrigation in the time of Chandra Gupta is already known to us through Megasthenes:

"The greater part of the soil is under irrigation, and consequently bears two crops in the course of a year."-Bk. I, Fragment i.

And again,

"Some superintend the rivers, measure the land as is done in Egypt, and inspect the sluices by which water is let out from the main canals into other branches, so that everyone may have an equal supply of it."—Bk. III, Fragment xxxiv.

These statements are borne out by the Arthasâstra, and, moreover, certain details are added which we do not find in Megasthenes In the passages

> इसप्रावर्त्तिसमुद्भागं पश्चमं द्युः । स्कन्धप्रावर्त्तिसं चतुर्थम् । स्रोतयन्त्वप्रावर्त्तिसं च ढतीयम् । चतुर्थं नदीमरस्रटाककूपोद्वाटम् । –- Bk. II, सीसाऽधचः, p. 117.

ा (वाह्म खंपायक को खम्) कुर्या दिविषयं राजा वाध्यदाकर षु वा। Bk. IV, p. 220.

we see that water-rates (जद्वभाग) varied according to the modes of irrigation, which were four in number, viz. irrigation by hand (चसप्रावर्भिम), irrigation by water carried on shoulders (জন্মप्रावर्त्तिम), irrigation by some mechanical contrivance (चोत्तयन्तप्रावर्त्तिम), and irrigation by water raised from tanks and rivers (नदीसरसटाकक्रपोदाटम). The rates were one-fifth. one-fourth, one-third and one-fourth of the produce respectively. Again, in Bk. III, वासुविज्ञयः, p. 170, which speaks of remission of taxes in the case of repair of old tanks and construction of new ones, and also in the case of improvement and extension of waterworks, we find it laid down-वातप्रवर्त्तिमनन्दिगिवस्वायतन-तटाककेदारारामषखवापानां सरसपर्षभागीत्तरिकमन्येभ्यो वा यथो-पकारं दयुः। which shows that there were not only means of raising water by bullocks, but also contrivances worked by wind power, i.e. windmills. In the next passage—

से तुभ्यो सुच्चतस्तीयमपारे षट्पणी दनः पारे वा तीयमन्वेषां प्रमादेनीपरुश्वतः ।

a fine of six panas is laid down for letting out the water of canals otherwise than through the desice-quie (\overline{uui}) and for hindering the flow of water through the same (\overline{ui}). This passage confirms the existence of sluice-gates referred to by Megasthenes.

In the above couplet the word $\overline{\overline{v}}_{\overline{g}}$ are cannot be taken as the technical term for canals; for the term is a general one and has been used in several senses in the Arthasâstra, *e.g.* bridges, watercourses, embankments.¹ But in Book II,² $\overline{\overline{v}}$ are:, we meet with the word $\overline{\overline{g}}$ are with the word $\overline{\overline{g}}$ are which means countries where water is drawn from $\overline{\overline{g}}$ are. This term $\overline{\overline{g}}$ are means an artificial watercourse, and was pernaps the technical name for canals.

Special care was taken for keeping tanks and other waterworks in good repair, and the minimum fine in the case of those who were prone to neglecting them, viz. the owners of rent-free lands, was fixed at double the loss caused by their remissness.⁴ There were other regulations, *e.g.* one prohibiting men from emptying a tank of its water and from allowing the water of a higher tank to flow

¹ Bk. III, p. 166; Bk. II, pp. 47 and 60; Bk. VII, pp. 297 and 305.

- ³ (चमितम् वर्षप्रसाणम्) हैसन्यानां च कुख्यावापानां च । p. 11e
- * अप्रतीकारे चीनद्विगुयो दण्डः, p. 170.

² Also Bk. II, pp. 54 and 122.

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into a lower one unless the latter had been useless for three consecutive years.

§ 4: Meteorology.—I cannot conclude this account of irrigation without pointing out that in those remote days the people had a workable knowledge of the science of meteorology. They had some sort of rain-gauge which enabled them to measure the rainfall in a particular tract of country in a given time.¹

 (i) षोड़ग्रद्रोणं जाङ्गलानां वर्षप्रसाणम् मध्यर्थमानूपानां देग्रवा-पानासर्थवयोदग्राग्नकानां चयोर्विधतिरवन्तीनामसितमपरान्तानां चैनन्यानां च क्रस्थावापानां च कास्ततः ।

 (ii) वर्षविभागः पूर्व्वपश्चिमझासयोः, दौचिभागीमध्यमयोः सुषमा-रूपम् ।

(iii) तस्रोपजव्यिर्वृषस्यतेषस्यानगमनगर्भाधानेभ्यः ग्राकोद-यासमयचारेभ्यः स्टर्व्यस्य प्रजतिनेष्ठताच । स्टर्याद्वीअधिदिः । ष्टइस्प्रतेष्षस्यानां सम्यकरिता । ग्राकाद्वृष्टिरिति ।

(iv) चयसाप्तादिकामेघा चाशीतिः कणाशीकराः

षटिरातपनेघानां रषा वृटिस्तुनाचिता।

The lines quoted above show that they arrived

¹ को छागारे वर्षमानमर लिमुखं कुण्डं खापयेत्—Bk. II, सदि-घाट चेयकर्म, p. 58. A vessel with its mouth 1 aratni wide was used as a rain-gauge, and one such vessel was put before the store-house. (1 aratni=24 angulas=about 2 ft.; an angula= the middle joint of the middle finger of a middle-sized man)— माजमस्य पुरुषस्य मध्यमाया चक्रुस्या मध्यप्रकार्षोऽक्रुस्तम् (-Bk. II, द्रस्तालमानम्, p. 106.

² Vide सीसाध्यत्रः, pp. 115, 116.

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at definite conclusions as to the quantity of rainfall in particular places. In Jangala (जङ्गल) countries the rainfall is 16 dronas (a drona being a cubic measure); in the country of the Asmakas (अम्मक), 131 dronas; in Avantī (चवनी), 23 dronas, and so on [passage (i)]. Besides, the rainfall is considered to be even, if it occurs during the commencing and closing months, i.e. Srâvana and Kârtika, and twothirds in the middle months, i.e. Bhâdra and Âśvin [passage (ii)]. The third passage speaks of the forecast of rainfall that can be made by observing the position, motion, etc., of the sun and Venus and Jupiter; the germination of seeds can be inferred from them also. The last passage indicates an elaborate classification of the clouds according to their characteristics. It speaks of three kinds of such clouds as poured in heavy showers for seven days together, eighty kinds of clouds that rained minute drops, and sixty kinds that appeared with sunshine. All this shows that the science of meteorology was brought to such a developed stage that the people could depend on its conclusions and guide their actions in their day-to day work of sowing seeds and reaping harvest.

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CHAPTER II.

THE DEPARTMENT OF LIVE STOCK: CATTLE AND PASTURE.

WE have in the previous chapter dealt with some of the public works of utility as described in the Arthasastra. We have seen how a special department existed for the development of mining, the impetus to the discovery of mines being given in the shape of a share in the mines discovered;¹ and how the department was placed under the charge of experts conversant with all the processes of that difficult industry. We have also seen how the promotion of irrigation was looked upon as one of the duties of the State and was not left to

¹ If a private person discovered a mine, he got one-sixth of it as his share; if he happened to be a Government servant, onetwelfth: खनिरतनिधिनिवेदनेषु षष्ठमंग्रंनिवेत्ता खभेता। द्वाद-ग्रसगं भृतकः । ग्रतसङ्खादूर्द्धे राजगानी निधि:। जनेषष्ठमंग्रं द्यात्—Bk. IV, कादकरचण्यम, p. 202. the meagre resources of private enterprise. In connexion with irrigation, we have also seen how the necessity of meteorological observations was recognized, and even simple contrivances were in use for purposes of rain-gauge (वर्षमानम् कुण्डम्).

We shall now turn to other institutions of public utility maintained by the State. It is a noteworthy fact that the importance of live stock to India, pre-eminently the country of agriculture, was then fully realized, and special care was taken by the Government for their healthy growth and improvement. Even at the present day Indian agriculture has been held to be suffering much from want of proper grazing grounds and commons for cattle and of a proper supply of fodder;¹ but in Chandra Gupta's time we find a special department to provide for pastures and grazing grounds for a proper supply of fodder and for the welfare of live stock in general. There were no less

¹ Compare in this connexion the following extracts from the article on agriculture in the *Imperial Gazetteer* (new edition): "In the deltaic areas and in the rice-tracts generally, the cattle are miserably weak. Grazing lands are here limited or totally wanting... General improvement is hopeless without assured fodder supplies..."—Vol. iii, pp. 77, 78.

than six chief officers for running this department: (i) गोऽधारु, the superintendent of cows; (ii) विजीताधारु, the superintendent of pastures and grazing grounds; (iii) द्धनाधारु, the gamekeeper; (iv) दखाधारु, the superintendent of elephants; (v) कुषाधारु, the superintendent of forests and forest produce; and (vi) घदाधारु, the superintendent of horses.

Let us first turn to the first of these officers. It must not be supposed that the superintendent of cows, as the name indicates, had to take care of cows alone. In fact, he had to do with other animals also, such as buffaloes, sheep, goats, asses, camels, pigs, mules and dogs. One of his chief duties was to appoint milkers (रोडक), churners (मज्यक) and hunters (जुञक) for fixed wages, to each of whom was assigned a herd of 100 heads.¹ He had also to see that the bulls were tamed and trained to the yoke by the cowherds (गोपाजक), and that strings were put through their noses,² as also

¹ गोपालुक-पिखारक (buffalo-herdsmen)—दोडक-मन्यकलुअ-का: शतं शतं घेनूनां चिरण्णभृता: पाल्रयेयु: । चीरघृतभृता चि यत्सानुपचन्युरिति वेतनोपग्राचिकम्—Bk. II, गोऽध्यच:, p. 128.

² दोइकाइनमतिक्रामतसत्फ खडानं दण्डः । रतेन नस्प्रदम्य-युगविन्धनवर्त्तनकाला व्याखाताः—Ibid., p. 130. to settle terms with herdsmen for the tending of animals under their charge. These terms were of four kinds :---

(i) Appointing, on fixed wages, cowherds and buffalo-herdsmen, each of whom was placed in charge of 100 head. This arrangement was called चेत्रजप्रतियादिक.¹

(ii) Appointing, on payment of a certain fee, cowherds, each of whom was placed in charge of a herd of 100 head, containing in equal numbers the following five classes of cattle, viz. aged cows (जरदगु), milch cows (घेनु), pregnant cows (जर्भचगे), young cows (पडोची), and female calves (जर्भचरी). The fee was 8 vârakas (*i.e.* 3_{20}^{3} seers) of ghee, as well as the tail and branded ² skin of dead cows. This system was called करप्रतिकर.³

(iii) Appointing, on the principle of profitsharing, cowherds whose herd comprised cattle

¹ Vide footnote (¹) on previous page.

² There were special brands to distinguish private cattle from the royal. Tampering with the royal brands was punishable: परपद्मनां राजाङ्केन परिवर्त्तयिता रूपस्य पूर्व्व साइसट्एं ट्यात ॥ (ग्रोऽधाज:)।

° जरद्गु-धेनु-गर्भिणी-पष्ठौद्ती-वत्यतरीणां समविभागं रूप-इतनेक: पालयेत्। घृतस्राष्टौ वारकान् पणिकं पुच्चं अञ्चक्षय्वर्भ वार्षिकं द्यादिति करप्रतिकर: ।--Ibid.

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with diseased limbs (बाधिसान्यज्ञान), those which could not be milked or were difficult to milk (बदोइदुदोंडा:), and those that killed their calves (प्रचन्नी). Each herd was composed of the above four classes in equal numbers. As the tending of these herds was difficult, it was rewarded by a share in the out-turn from the herds. This arrangement was known as मघोत्षष्टक.¹

(iv) Engagement of the services of the superintendent by private parties for tending their herds in the event of their own inability to do so, either from danger of thieves, or from apprehended danger from forests. In these cases, the fee charged by the Government was a tenth of the produce. This system was termed MUNENTERS.²

One other particular regarding these herds should be noted in passing. The total number of each herd was fixed at 100, but the number of male animals in each herd varied with its

¹ व्याधिनान्य क्रान्यदो हो दुर्दी हापुल घ्रीनां च समयिभागं रूप-शतम् पाल घन्म सब्जातिकं भागं दद्युरिति भगो त्इष्ट कम्।

-Ibid.

'परचक्राटवी भयादनुप्रविष्टानां पग्रतां पाचनधर्म्भेण दश-भागं द्युरिति भागानुप्रविष्टकस् ।-- Ibid. composition. A herd of 100 head of asses and mules was to contain five male animals; that of goats and sheep, ten; while that of cows, buffaloes or camels, four.¹

There was a register of cattle, kept by the superintendent. In it were noted the following varieties of cattle, viz. male calves (बत्या:), steer (बत्तनराः), tamable draught oxen (दम्यावरिनो eur:), bulls for impregnating the herd (जचय: पुङ्गवाः), oxen for pulling carts drawn by pairs (युगवाइन सकटवहा: वषमा:), cattle of which the flesh was food (स्त्ना:), buffaloes (महिषा:), draught buffaloes (ष्टष्ठ खत्मवाचिनः मचिषाः), female calves (वत्यिकाः), heifers (वतानरी), young cows (पडीही), pregnant cows (गर्भिणी), milch cows (घेन्), cows and buffaloes that had not yet calved (अप्रजात:) or were barren (वन्ध्याः), male and female calves only a month or two old or still younger (मार्घाइमारजा-ताखासासुपजा वत्सा वत्सिकास).2 These, together with the cattle that strayed away and were not claimed for a month or two by the owner who lost them (मार्चाद्वमाय प्रयापिता:), were branded, and the superintendent registered each of them

> 'पचर्षभं खराचानामजावीनां दश्लर्षभम् ग्रुकांगोमचिषोष्ट्राणां यूथं कुर्याचतुर्वृषम्।—Ibid. ² Vide ''गोऽध्यच:"।

according to its class as mentioned above, and also according to the brand, natural signs, colour, and distance between the horns. This duty of the superintendent was termed त्रजपर्यप्र.¹

The superintendent had also to take note of those animals that were missing $(\neg \overline{e})$ and also of those that were lost for good $(\overline{f} \neg \overline{e})$. Those that were stolen, had got mixed up in the herds of others, or had disappeared in other ways, were called $\neg \overline{e}$. Animals were regarded as $\overline{f} \neg \overline{e}$ when they met with either natural or violent death. Thus, it was recorded whether they died of poison, disease, old age, from being buried in mire or drowned in water; whether killed by tree or stone falling upon them, struck by lightning $(\overline{s} \neg \overline{e})$, or fallen a prey to tiger, snake, crocodile or forest fire.²

The State fixed the scale and standard of diet normally necessary to keep up the health, vigour and working capacity of all live stock.

¹ चक्कं चिक्नं वर्षे प्र्रङ्गानारं च जचणमेवसुपजानिवन्धयेदिति व्रजपर्यंग्रम्।—Ibid.

² चोरच्चनसन्ययूथप्रविष्टमवलीनं वा नष्टम् पङ्ग-विषम-व्याधि-जरा नोयाधारावसन्नं ष्टचतटकाष्ठशिलाभिइतमीशानवालसर्प-पाइ द्वाद्याद्विषन्नं विनष्ठं प्रमादादस्याभवेषु:--Ibid. The following table gives particulars about the dietary of bulls that were provided with nose-strings and equalled horses in speed and carrying loads.¹

For the aforesaid bulls :---

Quantities.	Approximate modern equivalents.			
½ bhâra of meadow-grass (यवस)	. 1½ seer.			
1½ bhâra of straw (を v)	. 3 seers.			
1 tula of oil-cakes, with cheese " if necessary to make				
	. $2\frac{2}{5}$ chataks.			
10 âdhakas of bran (해 또 흙 또)	. 12 chataks.			
(abo	$2\frac{2}{5}$ sikis ut $\frac{1}{2}$ kancha).			
1 prastha of drink (पान)	. 1 1 kancha.			
1 tulâ of मांस, i.e. fleshy part or pulp of fruits .				
1 drôna of barley (यव) or of cooked bean (साप)	44 chataks.			
1 ådhaka of curd (दाध)	. 13 chatak.			
1 drôna of milk (चीर).				
	$2\frac{2}{5}$ kanchas.			
1 prastha of oil or ghee $(\overline{\mathbf{a}}\mathbf{z})$. 1] kancha.			
10 palas of molasses (चार)	. 4 5 sikis.			
1 pala of ginger (एडिजनेर) may be substituted for				
drink (पान)	$\frac{\frac{12}{25}}{\frac{1}{2}}$ or about $\frac{1}{2}$ siki.			
1 kudumba of oil for rubbing over the nose (ते लुक	-			
	11 siki,3			
ेवचीवर्दानां नस्पाञ्चभदगतिवाद्दिनां यवसस्पार्धभार:, etc				
गोऽध्यचः ।				
² किसाटो-(cheese)-घाणपिण्याक-(oil-cakes)-क्तेदार्थ-Ibid.				

³ The above measurements have been made on the basis of η at (gunja) seed or two $\eta \eta a'$ (måshas) being taken as the unit of calculation, equivalent to $1\frac{5}{16}$ grains (Troy). See the chapter

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The same quantities of the above commodities less by one-quarter formed the food of mules, cows and asses; and twice the above quantities were given to buffaloes and camels. The quantities fixed above, however, could be varied to suit the needs of particular occasions. For example, the rations allowed to oxen kept to work were proportioned to the length of time they were worked, and in the case of cows that were milked, an increase was made in the amount of food.¹ The main items of food were of course water and straw, which were always given in plenty to all cattle,² while whey (set and base of the part of the part of the plent of plent of the plent of plent of the plent of plent of plent of plent of the plent of the plent of plent of plent of the plent o

There were various rules regarding the milking of cattle and the standard of dairy produce of all kinds. The milkers had to milk

³ जदी चत् चवराई भ्यो दयः ।

entitled तुलामानपोतवम् (Bk. II), which describes the weights and measures then in vogue. The measurements given therein coincide in the main with those arrived at independently from other Sanskrit works by Monier Williams in his famous Dictionary.

पारोनमचनरगोखराणां, दिनुणं महिषोङ्घाणां कर्मकरवत्ती-वर्दानां, पायनार्थानां च धेनुनां, कर्मकालतः फलतद्य विधा-दानम्।

² सर्वेषां टणोद्कप्रकाम्यमिति गोमण्डलं व्याखातम् ।

the cattle once or twice a day according to the seasons. Thus, in the rainy and autumnal seasons and in the first part of winter $(\overline{R}\pi\overline{m})$, they had to milk both in the morning and in the evening, while in the other seasons, only once in the day; and if anyone violated this rule and milked a second time, he was visited with the cruel penalty of having his thumb cut off. They had to milk at stated hours and make good any loss caused by neglect of this rule.¹

The churners had generally to conform to certain fixed proportions in regard to the preparations of milk. Thus, it was fixed that 1 prastha, *i.e.* $1\frac{1}{5}$ kancha, of ghee would be produced from 1 drona, *i.e.* $4\frac{4}{5}$ chataks, of cow's milk, one-fifth as much more from the same quantity of buffalo milk, and one-half as much more from the same quantity of milk of a goat or sheep. Where any variation of the above proportions occurred, as it must occur through a change in the quantity and quality of the food given to cattle, the exact quantity of ghee was ascertained by actual churning,

¹ वर्षां भरदेमनानुभयतः कारुं दयुः । भिशिरवसन्तयीयानेक-कालम् । दितीयकालदोग्धुरङ्गुष्ठऋदो दण्डः ।—दोडकालमति-क्रामतसत् फल्रहानं दण्डः ।—(गोऽभ्यचः) ।

and was fixed as the modified standard to which churners had to conform.¹

Besides the rules relating to the yield of living cattle, there were also rules regarding that of the dead. In case of the natural death of a cow or a buffalo, the herdsmen had to surrender the skin with the branded mark. The same rule applied to the cases of goat, sheep, ass, camel, etc. The herdsmen had also to give up the fat, bile, marrow, teeth, hoofs, horns and bones of the dead animals.²

Again, animals like goats and sheep were shorn every six months, and their wool (জর্মা) was made over to the superintendent.³

MEDICAL TREATMENT OF CATTLE.

It was also the duty of herdsmen to apply medicines to diseased animals. The due dis-

¹ चीरद्रोणे गवां घृतप्रस्तः । पञ्चभागाधिको सचिषाणां । दिभा-गाधिकोऽज्ञावीनां । सन्यो वा सर्वेषां प्रसाणं सूसििटणोट्कविग्रे-षादि चीरघृतष्टदिर्भवति ।---(गोऽधचः) ।

² कारणमृतस्याङ्गचर्भ गोमदिषस्य कर्णलचणमजाविकानाम् पुच्छमङ्गचर्म चाञ्चखरोष्ट्राणां बाखचर्म-वस्ति-पित्त-स्तायुदन्तखुर-ग्र्टङ्गास्त्रीनि चाइरेयुः।—Ibid.

अज्ञादीनां घारमासिकीमूर्णं याइयेत । तेनाञ्चखरोष्ट्रवराइ-ब्रजा बाखाताः ।-Ibid.

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charge of this important duty was secured by a healthy rule providing that when, owing to defects in medicine or carelessness in the treatment, the disease of an animal became serious, a fine of twice the cost of the treatment should be imposed; and when, owing to defects in the nature of the medicine itself, the animal died, a fine equal to the value of the animal was imposed.¹

Lastly, there were several humane regulations to prevent the cruel treatment of animals. There was a fine of 1 or 2 paṇas² by which causing pain with sticks, etc., to minor quadrupeds was punished. This fine was doubled when the beating caused the animal to bleed. In the case of larger quadrupeds the above rates were doubled, and, in addition, an adequate compensation was demanded to cover the expense of curing the beasts.³

¹ बालटद्वयाधितानां गोपालकाः प्रतिकुर्युः ।--Ibid.

जिया भेषच्यसङ्गेन व्याधिवृद्धी प्रतीकार्रोंद्वगुणी दण्डः । तदव-रोधेन वैज्जम्ये पचमूखं दण्डः । तेन गोमण्डलं खरोष्ट्रमस्विषसजावितं च व्याखातम् ।—Bk. II, खत्र्याध्यचः, p. 185.

² A pana is a weight of copper used as a coin = 20 måshas = 4 kåkinis.—Monier Williams.

³ चुद्रपग्रज्ञां काष्ठादिभिर्दुःखोग्पादने पणो दिपणो वा दण्डः । शोणि तोग्पादेन दिगुणः । मच्चापग्रज्ञामेतेष्ववस्थानेषु दिगुणो दण्डः, समुत्यानव्ययस्थ ।— Bk. III, दण्डपार्थ्यम्, p. 197.

We find it laid down that cattle such as a calf, bull or milch cow must not be slaughtered. A fine was imposed on those who slaughtered or tortured the animals to death.¹

We have seen already how the diet of cattle was regulated. We shall now see what arrangement was made for grazing them on pastures. For opening, preserving and improving the grazing grounds, a separate superintendent, called विनीताधक, was appointed. He had to observe various rules regarding the working of his department. We find it distinctly laid down that the same forest could not be used as pasture for the cattle of neighbouring villages and towns throughout the whole year. Particular forests were assigned to particular seasons (चतुनिभक्तमरण्डम). Thus a system of rotation was introduced by which the pastures were kept up unimpaired, with their resources unexhausted by continuous use.² Pastures were generally opened

¹ यत्सो छषो धेनुर्खेषामवध्धाः । घातः पञ्चाग्रत्को द्ण्डः । क्लिष्टघातं घातयतञ्च ।--Bk. II, छ्रनाध्यज्ञः, p. 122.

² जुञ्जकञ्चमणिभिरपास्त खेनवालपरवाधभयमृतुविभन्नमरण्यम् चारयेषु:--Bk. II, गोऽभ्यचः । in forests, in uncultivated tracts, and in intermediate areas between places infested by wild animals, thus promoting at the same time the reclamation of waste lands.¹ There were thus several pastures in a locality, and it was the business of the herdsman to see which of them would suit the cattle under his charge. He was naturally guided by two considerations, viz. the physical strength of his cattle and the degree of protection from danger available either from persons or from the security of the place.²

As to the kinds of animals that were allowed admission into the grazing grounds, we have information from two passages,³ the first of which mentions cows, buffaloes, goats, sheep, asses, camels, horses, and mules; the second, which appears in a different context, referring

¹ चक्रायां भूमी पश्चभ्यो विवीतानि प्रयच्छेत्। (Bk. II, भूमि-च्छिद्रविधानम्, p. 49); भयानारेषु च विवीतं खापयेत्। (Bk. II, विवीताध्यचः, p. 141); and चटतुविभन्नमरखम् चारधेयुः (supra).

² जपनिवेश्दिग्विभागे गोप्रचारान् वलान्वधते वा गवां रचा-सामधीच ।---Bk. II, गोऽध्यक्तः ।

³ (i) गोमच्चिषमजाविकं खरोष्ट्रमचतराच व्रज्ञः—Bk. II, समा-इर्नुससुद्यप्रखापनम्, p. 60.

(ii) गवाचरघोट्टानां च त्रजः-Bk. VII, चीनग्रक्तिपूरणम्, p. 305. to cows, horses and camels as being the animals that flourish on pastures and are the source of power to the king.

The safety of the cattle was one of the chief concerns of the superintendent of pastures. It was ensured by the appointment of hunters, who maintained a pack of hounds to aid them in their work of watching thieves and enemies and warding off danger from snakes, tigers, etc.¹ The hunters had recourse to the following means of calling in the aid of the king and the king's men:—

(i) Blowing conch-shells and beating drums (सङ्घदुन्दुभिषद्यम्).

(ii) Remaining concealed amid trees and mountains, and afterwards sending the information (ইত্রুজ-বিক্রা:).

(iii) Riding away on swift horses, etc. (सीधवाडनाः).

(iv) Flying carrier pigeons belonging to the king's household, with royal passports attached to them (राज्ञ: गुद्रायुक्ती: स्टब्ल्योनी:).

¹ चोर-वालभयात्रिस्नारण्डानि ग्रीधयेत्। लुव्यक्तचगण्डिमः परि-त्रजेगुररण्डानि---Bk. II, विवीताधचः, p. 141.

लुन्धकचगनिभिरपास सेन-वालपरवाधभयमृतुविभक्तमरण्यम चारयेयुः---Bk. II, गोऽभ्यचः (also quoted supra).

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(v) Announcing danger by a succession of beacon fires $(\frac{1}{2}\pi)^{1}$

Besides these general precautions that had to be adopted by the superintendent of pastures, the duty of taking special protective measures was thrown on the herdsmen themselves. They had to attach bells or other sounding instruments to the necks of timid animals. These served the double purpose of scaring away snakes and other undesirables and of helping the herdsmen to easily find out, by following the direction of the sound, the animals that went astray.² When the cattle required watering and bathing, their safety was secured by leading them only to those streams and ponds which were marked out as being free from mire (ज्वनर्दम) and crocodiles (जयाद), and the approaches to which were gradually sloped instead of being abrupt and steep (समयुद्रनीर्थ).3

¹ तस्करामिचाभ्यागमे शङ्ख दुन्दुभिशव्दमप्राद्धाः क्रुर्युः । शैलष्टच-विरूढ़ा वा, शीघ्रवाइना वा, चमिचाटवीसचारं च राज्ञोग्टइक-पोतैर्मुद्रायुक्तैईारयेयुः, धूमाग्निपरम्परया वा।—Bk. II, विवी-ताध्यच:, p. 141.

² सर्पयालचासनार्थं गोचरानुपातज्ञानार्थं च वस्तूनां घष्ठातूर्थं च बन्नीयुः ।--Bk. II, गोऽधचः ।

⁸ समयूदतीर्थमकर्दमग्राइसुदकमवतारपेथुः पालयेयु अ—*Ibid*.

Another direction for the guidance of the herdsmen was that they should divide the cattle, while grazing, into groups of ten according to colour, the object being to avoid confusion between herds and to facilitate the herdsman's work of singling out his herd after grazing.¹ The cowherds were strictly prohibited from allowing the bulls under their charge to fight in the grazing grounds, and were fined for violating the rule.²

There were also a few rules applying to losses of cattle by theft or otherwise. If any animal were stolen, or killed by snakes, etc., or died through old age or disease, the herdsmen had to report it forthwith to the superintendent of cows; otherwise, they had to pay as penalty the price ($\overline{\mathbf{w}\mathbf{u}\mathbf{h}\mathbf{w}}$) of the animal lost.³ If an animal belonging to the flocks under $\overline{\mathbf{m}s\mathbf{w}\mathbf{u}}$: were killed or stolen, the crime was visited with capital punishment; but if it were

1 वर्षावरोधेन दश्रवर्गाणां रचेषं करणीयम् ।--Ibid.

² यूथव्यं वृषेणावपातयतः पूर्व्यः साइसदण्डः घातयतः जनसः । (पूर्व्यसाइसदण्ड-- a fine ranging from 48 to 96 paṇas)--- गोऽध्यच्यः ।

³ स्तेनयास्तर्भर्प-पात्त-ग्टहीतं याधिकरावसन्नं च चावेद्येयु-रन्यथा रूपनूत्त्यं भजेरन्।--Ibid.

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replaced by another, only a fine was inflicted. Rewards were also given to those who recovered the stolen cattle from thieves.¹

¹ खयं इना धातयिता इर्ता सारयिता च वध्यः । परपग्नजां राजाक्वेन परिवर्त्तयिता रूपस्य एकैकिस्य पूर्व्व साइसदण्डं दयान् । सदेशीयानां चोरद्वतं प्रत्यानीय पणितं रूपं डरेत् । परदेशी-यानां नोचयितार्ध्यं दरोत्---Ibid.



CHAPTER III.

THE DEPARTMENT OF LIVE STOCK (continued): GAME, FORESTS AND HORSES.

In the last chapter have been described the functions of two of the six chief officers who were to perform special duties in connexion with live stock, viz. the superintendent of cows and the superintendent of pastures. The present chapter will detail the functions of three of the remaining officers, viz. the gamekeeper, the superintendent of forests, and the superintendent of horses.

THE GAMEKEEPER.

The Government of Chandra Gupta addressed itself in various ways to the protection of lower animals. There were issued specific regulations affording State protection to certain classes of animals, and for this purpose were also established and maintained forests (चभयवन), the animals whereof were exempted from capture, molestation and slaughter. Into these forests none could enter, and the violation of this rule was visited with fines.¹ For the enforcement of these regulations a special superintendent was appointed called च्रनाथच (gamekeeper).

The following were the classes of animals that were given protection :---

(i) Birds, deer and other animals living in the forests under State protection, as well as fishes in the ponds therein.²

(ii) Those birds, fishes, deer and other animals that do not prey upon life.³

(iii) Calves, bulls and milch cows.⁴

(iv) Ocean animals resembling elephant,

¹ प्रदिष्टाभयानामभयवनवासिनां च मृग-पग्र-पचि-मत्स्यानां बन्धवधद्तिंसायासुत्तसं दण्डं कारयेत् । क्रुटुम्बिनां अभयवनपरि-ग्रहेषु सध्यमं ।—Bk. II, स्ट्रनाधचः, p, 122.

जनम द्ख, a fine ranging from 500 to 1000 panas; मध्यम द्ख, a fine ranging from 200 to 500 panas.----Bk. III, साइसम, p. 192.

² See the foregoing passage.

³ खप्रष्टत्तवधानां मत्स्यपत्तिणां वन्धवधसिंसायां पादोनसप्तविंशति (26३)—पणमत्ययं कुर्व्यात् । मृगपग्रज्ञां द्विगुणं।—(स्द्रनाध्यद्यः)।

⁴ वत्सो छषो घेनुचैंपामवध्याः। घातः पश्वाणत्को दण्डः। क्तिष्टघातं घातयतच्या-Ibid.

horse, man, ox or ass. This, by the way, points to a close familiarity with the ocean and marine life.¹

(v) Fishes in rivers, lakes and canals (कुल्या).²

(vi) A few game-birds, specifically named as follows: चारच (crane) in rivers, lakes and canals, क्रोच (osprey), जन्कोमक (sea-eagle), दान्यूच (gallinule, an aquatic bird), चंच (goose or gander, swan, flamingo, etc.), चक्रवाक् (Brahmany duck), जीवझीवक (a kind of pheasant), मृज़राज (fork-tailed shrike), चकीर (partridge), मनकोकिज (cuckoo), नपूर (peacock), ग्राक (parrot), मदनमारिका (Turdus salica--birds like mainâ).³

(vii) Those birds and beasts that were regarded as sacred.⁴

Moreover, tolls were levied upon the capture

² मत्स्याः नादेयासटातकुत्त्वोद्भवाः—Ibid.

³ सारसा नादेयासाटाक कुस्योझ्वाः । क्रीच-उन्क्रोग्रक-दात्यूइ-इंस-चक्रवाक्-जीवझीवक-भृङग्राज - चकोर - मत्तकोकिस - मयूर-ग्रुक-सदन-ग्रारिका विच्तार-पैचिषो माङत्याखान्येपि प्राणिनः ,पत्तिमुगा चिंसावाधेन्यो रच्याः । रचातिक्रमे पूर्वसाइसदग्रुः (a fine ranging from 48 to 96 paṇas).—Ibid.

⁴ साङ्ग्रायानोप प्राणिनः पचिमुगा डिंसायाधेश्वी रच्छाः— (Supra.) An interesting list of protected animals, some of which also appear in this list, is given in Asoka's Rock Edict V.

of those birds, beasts or fishes that preyed upon life and were thus the legitimate objects of capture. Of the live captured animals, the gamekeeper took a sixth, to be afterwards set at large in special forests under the State, and a tenth or more was appropriated by Government.¹

For the safety of the protected animals in the State forests, any animal growing vicious or in any way harmful to the rest was captured and killed outside the forests.²

HUNTING FORESTS.

Hunting down game animals in the hunting forests was allowed, and not only the king himself but also private individuals enjoyed the privilege. We learn from Asoka's Rock Edict VIII that it was a practice with the kings to go out on hunting excursions, which Asoka abolished in the eleventh year of his reign. Megasthenes also describes the

¹ प्रष्टत्त दिंगानां परिग्ट होतानां षड्भागं ग्ट कीयात्। सत्स-पचिषां दश्रभागं वाधिकं सृगपग्रद्रनां ग्राख्लं वाधिकं। पचिसृगाणां जीवत् यङ्भागं चभयवने घु प्रसुद्धेत्।— (स्द्रनाधचः)।

² दुष्टाः पश्चमृगवाज्ञा मत्स्था आभयचारिणः अन्यच गुप्तिस्थाने भ्यो वधबन्धमवा झुयुः ।--- Ibid.

grand scale on which the royal hunting was organized.¹

It seems from the extract of the Arthasâstra quoted below that the king had a hunting forest exclusively for his own use. Tt. was provided with only one entrance (एक द्वार) and had a canal running round it to ward off intrusion (बातगन्न). Inside were planted fruittrees, thornless plants, creepers and shrubs (खाद् फलगुलगुल्फगुल्फमकण्डकिद्रमम्), and there was also a large tank (जनानतीयाग्रयं). There roamed at large not only the milder game animals (दानामग-चत्रणद) but also some of the wilder ones, but deprived of their natural offending weapons like nails and teeth: viz. tigers, male, female and young elephants, and other game animals (भग्ननखदं ष्ट्रव्याल-मार्गायुक-इत्ति-इत्तिनी-कज्ञभ-मुगवनं).2

Besides this imperial hunting forest, there were other hunting forests ³—all under the

¹ Megasthenes, Bk. II, Fragment xxvii.

² तावनावमेकदारं खातगुर्धु खादुफखगुच्चगुच्चमकष्टकिद्रुम-सुत्तानतोयाण्ण्यं दान्तमृगचतुष्पदं भग्ननखदंष्ट्रव्याखमाग्रीयुक-इसि-इसिनी-कलभ-मृगवनं विद्वारार्थं राज्ञ: कारयेत्।—Bk. II, भूमि-च्छिद्दविधानम्, p. 49.

³ सर्वातिष्यिमृगं प्रत्यन्ते चान्यन्यृगमनं भूसिवग्रेन वा निवेग्रयेत्। —Bk. II, भसिष्किऽविधानमः।

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general superintendent (कुयाधव), who had another duty to perform in connexion with live stock, viz. the capture, when needed, of birds and beasts under his care.¹

THE SUPERINTENDENT OF HORSES.

The superintendent of horses had manifold duties to perform, viz. : (1) to keep a register of horses; (2) to classify them according to breed, age, colour, marks, size, etc.; (3) to provide for their stabling; (4) to determine their rations; (5) to break and train them according to their mettle; (6) to provide for their medical treatment by veterinary surgeons; and (7) to arrange for the taking of proper care of them in other ways, as detailed below.

Registration and classification.

Horses were registered not only according to their natural qualities, but also in several artificial but convenient ways. Thus, horses were regarded as belonging to the three classes or types of तीरूप (fiery), भन्न (gentle) and मन्द

¹ अङ्गार तुषभक्षानि सृगपग्रापचिव्यालीवाटा: काष्ठत्वणवाटा-चेति ।---Bk. II, कुण्याधच:, p. 100. (sluggish).¹ They were also classified according to the places of their origin. Among these have been mentioned the following places, some of which have been identified :---

 (1) कामोज (Kâmbhôja), (2) चिन्मु (Sindhu), (3)
 भारष्ट (Ârațța), (4) चनायु (Banâyu), (5) याझीक (Bâlhîka), (6) सीवीर (Sauvîra), (7) पापेय (Pâpeya), (8) तैनज (Taitala).²

ा तेषां तीच्रणभद्रसन्दवभेव साद्वाद्यमीपवाद्यकं वा कर्म्भ प्रयो-जयेत्।---Bk. II, च्यचाधचः, p. 188.

² प्रयोग्धानासुत्तमाः काभोजकसै व्यवारप्टजवानायुजाः । सधमा बाझीक-पापेयक-सौवीरक-तैतलाः । ग्रेषाः प्रत्यवराः ।—Ibid.

Identifications :---

- (1) काफोज Afghanistan: Kaofu (Kambu) of Hiuen Tsiang. (N. L. Dey's Geographical Dictionary.)
- (2) चिन्ध-Sindh.
- (3) UITE-Punjab, land of the Arâshtrakas, i.e. the kingless. (Cunningham's Geography of Ancient India, p. 215.)
- (4) वनायु-Arabia. (वाचरात्यम् of T. N. Tarkavachaspati.)
- (5) बाझीब-Balkh in Central Asia. (Monier Williams.)
- (6) that—or Sophir of the Bible; according to Cunningham, the same as the modern Eder in Guzerat. (Geogr. of Anc. Ind., p. 497.)

It is interesting to note that almost all the places mentioned above appear in the following sloka of the Râmâyana :---

> काम्बोजविषये जातीर्थाक्कीतैच दयोत्तमेः वनायुर्जीर्णदीजीच पूर्णा इरि दयोत्तमेः ।

-Bâlakânda, Sarga 6, sloka 22.

नदीजा: in the sloka = सिन्तुनदी समीपोक्तवा: | (Râmânuja.)

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Of these places the first four were held to supply the best breed of horses, and the remaining four, horses of the second quality. Horses of inferior quality came from other places. Thirdly, there was another method used to classify horses, viz. by the way in which horses were procured. According to this method, horses could be of the following descriptions :--

(1) पणागारिकं (brought to the sale-house for sale); (2) क्रयोपागतम् (recently purchased); (3) चाइवज्ञअम् (captured in war); (4) चाजातम् (of local breed); (5) गाइायकागतम् (sent for help as loan); (6) वनस्कानं (wild and fresh from forest); (7) यावत्काजिकं (kept in the stable only for a while).¹

A method of testing horses.

The mettle of a horse was inferred from certain measurements of parts of its body as explained below :—

> The face (मुख) of the best horse measures 32 angulas.

¹ चत्राधचः पण्णागारितं क्रयोपागतमाचवल अमाजात साहाय-कागततं वनस्कातं यावत्कालितं वाध्यपर्यंगं कुल्जवयोवर्षचिक्र-वर्गागमेलेखियेत ।----(चत्र्याधचः)। Its length (चायाम), five times its face = 160 angulas.

Its shank (जङ्गा), 20 angulas.

Its height (जन्मेंभ), four times its shank = 80 angulas.

A defect of 3 angulas must be allowed in the above measurements in respect of horses of the second quality, and of 6 angulas in respect of inferior qualities.

The girth (परिणाइ) of the best horse is 100 angulas;

of horses of second quality, 95 angulas;

of horses of lowest quality, 90 angulas.¹

Stables.

The provision of suitable stables was one of the chief duties of the superintendent. This is also hinted at by Megasthenes.²

The size of each stable was of course determined by the number of horses to be kept therein. The length of each room of the

¹ द्वाविंग्रद्ङ्गुलं सुखसुत्तमाखस्य, पश्चसुखान्यायासः, विंग्रत्यङ्गुल जङ्खा, चतुर्जङ्खा उत्त्षेधः, व्यङ्गुलावरं सध्यसावरयोः, ग्रताङ्गुलः परिणाद्दः, पश्चभागावरं सध्यमावरयोः ।—Ibid.

² "There are royal stables for the horses and elephants . . . ' ---Bk. III, Fragment xxxiv. stable was to be double the length of a horse. It had four doors on the four sides, and an open space in the middle where horses could roll themselves.

The breadth of the apartment for each horse ,was to be four times the width of the horse, and its floor was to be paved with smooth wooden planks (सदयफासनास). It must have a trough for food (सवादगतोडन), and be provided with apertures for the removal of excreta. The rooms should face preferably the north and the east. Horses, mares and colts had separate compartments.

There were spacious corridors (चप्रयोग) in the stable provided with doors, and there were seats and pegs (चायन-फजक) for monkeys, peacocks, spotted deer (घपन), mungooses (नकुज), partridges (चकोर), parrots (ग्राक) and mainâs (मारिका).¹ The object of keeping these animals in the stable becomes apparent from a passage

¹ च्रश्वविभवेनायतामञ्चानाम् द्विगुषविखारां चतुर्द्वारोपावर्त्त-नमर्थां सप्रयोवां प्रद्वारासनफलकयुक्तां वानर-सयूर-ष्टषत-नकुल-चकोर-ग्रुक-शारिकाभिराकीर्णां शालां निवेण्येत् ।

भ्यश्वानाम् चतुरखञ्चच्एफलकाखारं सखादनकोष्ठकं समूच-पुरीषोत्सर्गमेकैकग्रः प्राङ्मुखमुदङ्मुखं वा खानं निवेग्रयेत्। ग्राज्ञावग्रेन या दिग्विभागं कल्पयेत्। वडवाष्टषकिग्रोराणां एकान्तेषु।---(चात्राध्यचः)।

in Bk. I, निमानग्रिणिध:, which runs as follows: "Cats (मार्जार), peacocks (मयूर), mungooses (मकुछ) and spotted deer destroy snakes; parrots (ग्रज), mainâs (ग्रारिका) or fork-tailed shrikes (भुङ्गराज) shriek out when they smell poison; ospreys (क्रीष) get excited in the vicinity of poison, pheasants (जीवज्ञीवक) feel distressed, cuckoos (मनकोकिछ) die, and partridges (चकोर) redden their eyes."¹ It may be noted in this connexion that the practice of keeping monkeys in stables in the belief that horses keep good health in their company, still obtains.

Rations.

The superintendent regulated the rations of the horses under his charge in the following ways:—

For the best horse :--

Modern equivalents.

Quantities.

¹ सार्जारसयूरन कुख ष्टवतो त्सर्भासार्पान् भक्तयनाि । ग्राक शा-रिका भृङग्राजो वा सर्पविष शङ्कार्था क्रो शति । क्रौ घो विषाभ्या शे साद्यति । ग्रायति जीवझीवकः । चियते मक्तको किखः । चको-रस्त्राचिषी विरज्जते ।—Bk. I, निशानप्रणिधिः, p. 40.

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Quantities.	Modern equivalents.
1 prastha (प्रस्थ) of oil	1 ₅ kancha.
5 palas (प.) of salt	$2\frac{2}{5}$ sikis.
50 palas of मांच (fleshy part or pulp of fruits)	1 chatak 4 sikis,
1 âdhaka (आडक) of रस (drink)	1 [±] chatak.
2 âdhakas of curd (दिधि)	$2\frac{2}{5}$ chataks.
5 palas of sugar (चार) for making food	
palatable	$2\frac{2}{5}$ sikis.
1 prastha of liquor	1] kancha.
2 prasthas of milk (पथ:)	$2\frac{2}{5}$ kanchas.

Those horses that were tired by long journey or by carrying loads were given 1 prastha of oil or ghee more for perfuming their food (भनुवासन), 1 kudumba $(1\frac{1}{2} \text{ siki})$ of oil or ghee for rubbing over the nose, $\frac{1}{2}$ bhâra (भार), *i.e.* $1\frac{1}{2}$ seer, of meadow-grass (यवस), twice as much of straw (त्वस) and hay for a bedding of 6 aratins (12 ft.) or as much straw as can be held within the arms (भड़रणि: परिचेप: प्रजीडपादो वा त्वसस मुजद्दयपरिवंगयाद्य:).

The same quantity of rations less by onequarter was given to horses of medium and inferior quality. A draught horse or stallion of medium size was given the same quantity as the best horse, and draught horses of lower size the same quantity as a horse of medium quality.

Mares and mules (परमम्) were given one-

quarter less of rations. A mare that had just given birth to a colt was given 1 prastha or $1\frac{1}{5}$ kancha of ghee for the first three days; then for the next ten days, 1 prastha, *i.e.* $1\frac{1}{2}$ kancha, of $\pi \pi$ (*i.e.* pounded gram, etc.), and oil or ghee mixed with medicine. Afterwards, she was given 3π (boiled rice), 3π (meadow-grass), and other things suited to the season.

Half the rations of mares was generally given to colts; but a colt of ten days was fed on $\frac{1}{4}$ kudumba $(\frac{1}{4}$ siki) of ghee, 1 kudumba $(1\frac{1}{2}$ siki) of $\pi\pi$ and 1 prastha $(1\frac{1}{5}$ kancha) of milk till it was six months old. Gradually, the above rations were increased half as much during each succeeding month, with the addition of 1 prastha of barley, till it became three years old. It was given 1 drôna $(4\frac{4}{5}$ chataks) of barley until four years of age, when it became fully developed and serviceable.

Training given to horses.

Horses were employed for the purposes of war or for ordinary purposes, according to their mettle. They were therefore trained not only for ordinary work of the State in times of peace

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(भौपवाद्यके), but also for the more difficult movements required in war (जन्नाद्यन). The latter movements were of the following kinds :---

(i) बखान (circular movement):—(a) चौपवेणुक (turning in a circle with a diameter = 1 cubit);
(b) वर्त्तमानक (advancing, and yet turning in a circle as above); (c) यमक (running the figureof-eight); (d) चाजीव्युत (running and jumping simultaneously); (e) व्याह (movement of only the forepart of the body); (f) खबचाजी (movement of only the hinder portion of the body).

(ii) नीचेंगेन (slow movement with the head and ears kept erect):-(a) प्रकीर्णन (a combination of the movements mentioned above);
(b) प्रकीर्णोत्तर (same as the previous, but with one kind of movement kept prominent);
(c) निषच (a movement in which the hinder part of the body is kept steady); (d) पार्चानुष्टन (movement sideways); (e) जन्मिमार्ग (movement up and down like a wave); (f) सरमज्जीहिन (playing like a सरम, a kind of deer); (g) सरमज्जन (leaping like a सरम); (h) निनाज (a movement using only three legs); (i) नाच्चानुब्न (moving right and left); (j) पचपार्षि (movement by using two and three legs alternately); (k) निर्माचन

(pacing like a lion); (l) আমুন (long strides); (m) ক্ষিত্ত (moving straight without a rider); (n) আহিন (moving with the forepart of the body bent); (o) ৰুবিন (moving with the hinder part of the body bent); (p) yআনিকীৰ্ছ (zig-zag motion).

(iii) जङ्गन (jumping):—(a) कपिष्ठुत (jumping like a monkey); (b) भेकषुत (jumping like a frog);
(c) एकष्ठुत (sudden jump); (d) एकपादकुत (jumping with one leg); (e) कोतिजयंचारि (leaping like a cuckoo); (f) जरस (dashing with the breast almost touching the ground); (g) वकचारी (leaping like a crane).

(iv) घोरण (gallop):—(a) काङ (imitating the flight of a heron); (b) वारिकाङ (dashing like a water-duck); (c) मयूर (running like a peacock);
(d) चाईमयूर (half the speed of a peacock);
(e) नाकूच (dashing like a mungoose); (f) चर्ड-नाकूच (half the speed of a mungoose); (g) वाराच (running like a boar); (h) चईवाराच (half the speed of a boar).

(v) नारोड्न is चजाप्रतिकार, i.e. response to signals.

Over and above these a few kinds of trot are enumerated as follows :---

(1) मार्ग:---(a) विक्रम (trotting according to strength); (b) भद्राचाच (trotting with good

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breathing); (c) भारवाद्य (trotting with a load on the back). (2) घारा:--(a) विक्रम (pacing according to strength); (b) वच्चिन (pacing with circular movement); (c) जपकख (pacing with gallops); (d) जपजब (middle speed); (e) जव (low speed).¹

Medical treatment of horses.

The superintendent had to report to the king the number of horses that were diseased or had defective limbs (अप्रसार क्याधितां सावेद्येत्), and put them under the treatment of veterinary surgeons, whose duty was not only to treat the diseases of horses, but also to see that all parts of their body were harmoniously developing. They gave advice to the superintendent regarding the change of diet of the horses to suit particular seasons. They were fined if the diseases were aggravated or took a bad turn, and had to make good the loss if a horse died through defective treatment.²

¹ The explanation of the above technical terms has been taken mostly from the Commentary of Bhattasvâmî.

² अञ्चानां चिकित्सकाः भरीरज्ञाग्रद्विप्रतीकारमृतुविभक्तम् चाद्वारम् (प्रतिदिभेयु:)---(अञ्चाध्वचः)।

क्रियामैषेच्यसङ्गेन व्याधिकृंदी प्रतीकारदिगुणो दण्डः। तदप-राधेन वैलोग्धे पत्रमूखं दण्डः।—Ibid.

A few other rules.

As regards the distances to be traversed by draught horses, the rule was that they should run six, nine, and twelve yojanas¹ according to their quality. Five, eight, and ten yojanas were the maximum limits of distance for riding horses.

Horses disabled by disease, age or war and rendered unfit for active service were relieved from all work.²

The grooms (स्तवपादक), those who bound them in stables (अववयक), supplied meadowgrass (यावचिक:), prepared the meals of horses (विधापाचक), watched the stables (खानपाचक), dressed their hair (तेमकार), and detected poison (जाइज़ीविन्) were liable to a fine of a day's wages for neglect of duty.³ The जाइजीविद: were the grooms, cooks and veterinary surgeons, for it was they who had to taste the

¹ A yojana = $6\frac{9}{11}$ miles.

ष च द्वाद ग्रेति योजनान्ध्रधा रय्यानां, पश्चयोजनान्य थाष्ट-भानि द ग्रेति ष्ठष्ठवाद्यानाभञ्चानाभधा।— (श्वञ्चाध्रज्ञः)।

² युद्धवाधिजराकर्माचीषाः पिखगोचारिकाः सुरसमरप्रयोच्याः। पौरजानपदानाम् चर्धेन वृषा वङवासु चायोच्याः ।—Ibid.

³ कर्मातिक्रमे तेषां दिवसवेतनच्चेदनं कुर्यात् ।--Ibid.

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food of the horses.¹ The attendants of horses were enjoined to make a careful use of what they brought from the treasury or the storehouse for purposes of the stables, so as to prevent waste.² There were expert ropemakers for making ropes for horses; while the manufacture of accoutrements was the work of the chariot-makers ($\mathbf{w}\mathbf{n}$:).³

Ceremonies observed for the welfare of horses.

In conclusion, it should be remarked that horses were accorded an almost human treatment, which indicates the great value attached to them. Besides the rules prescribed by experience and science to secure the health and well-being of horses, there were certain religious ceremonies observed to influence unseen forces in their favour. The horses were regularly washed, bedaubed with sandal, and even garlanded twice a day. On new-moon days, the

¹ विधापाचक सूचग्राइक चिकित्सका: प्रतिसादभाज: ।—Ibid.

² को ग्रको छा गाराभ्याम् च ग्टही ला मास जाभम् ख खवा इश्विन-घेत्।--Ibid.

° तेषां बन्धनोपकरणं योग्धाचार्थाः प्रतिदिश्रेयुः। सांग्रामिकं रथाचाजक्वारंच स्त्रताः।—Ibid.

sacrifice to $Bh\hat{u}tas$ was performed; and on fullmoon days, auspicious hymns were chanted. On the ninth day of the month of $\hat{A}svin$, and also at the beginning and end of journeys, the priest invoked blessings on horses by performing the ceremony of writer, or the waving of lights.¹

> ¹ दिरह्नस्नानमञ्चानां गत्थसास्यं च दापथेत् क्रय्पपत्विषु भूतेच्याः ग्रुझ्तेषु खलिवाचनम् । नीराजनासाञ्चयुजे कारयेव्रवग्रेचनि याचादायवसाने वा व्याघौ वा ग्रान्तिके रतः ।—Ibid.



CHAPTER IV.

THE DEPARTMENT OF LIVE STOCK (continued): ELEPHANTS.

ONE of the four well-known divisions of the old Hindu army was the elephant force, on the efficiency of which depended to a great extent the efficiency of the army as a whole.¹ There has been on record many a battle in early Indian history in which elephants carried the day. Hence the rearing up of a good breed of elephants was recognized as one of the special cares of Chandra Gupta's Government, which made itself famous by the strength of its army organization. The killing of an elephant was visited even with capital punishment, which shows the great care taken for them by the State.

¹ The references in this chapter are to भूसिच्छिद्रविधानम्, इस्त्यथाच: and दसिप्रचार: Bk. II.

The department of elephants had several officers. At the head was TRANT, the superintendent of elephants, whose main duties were (1) to see that the elephant forests were well protected, and (2) to superintend the internal arrangements in the elephant stables and the proper training of elephants by experts. The immediate work of the maintenance and upkeep of the elephant preserves was, however, not his look-out. This was left to another officer called नागवनपास, the superintendent of elephant forests. He had a staff of assistants called नागवनाधच's, the keepers of elephant forests, through whom he had to acquaint himself with the limits as well as the paths leading into and out of the forestsespecially those that were mountainous or boggy or contained rivers or lakes. The capture of elephants was also their concern, in which they were helped by a special set of men. These were: (i) इत्रिपक (elephant drivers); (ii) पादपाग्रिक (those who slip nooses round the legs of elephants); (iii) चैंगिक (boundary guards); (iv) पारिकमिक (servants for miscellaneous works); (v) वनचरक (foresters); and (vi) चनीकख (elephant trainers).

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The need for the presence of elephant trainers (चनीकच), mentioned last in the above list, was owing to the fact that they alone could readily ascertain those elephants that were fit for capture; for certain classes of elephants were exempted from capture, viz. those that had small tusks like those of female elephants (\overline{q} ,),¹ diseased (चाचिन) or pregnant elephants as well as those that suckled their young (गर्भचेचो and चेनुका), and elephants below twenty years of age or without tusks (जक्रच); young elephants (निक्क) were as a rule allowed to remain at large, and only a few were captured to train for sports.

The captors, with five or seven female elephants (चचिव सकी) which had been specially taught the devices of capture, roamed about in summer--the season for the capture of elephants--in the forests, and traced the whereabouts of herds of elephants by following the course of their dung and urine (चरिस वपुरी-षच्द्र वास) and by observing their footmarks (पदा), the spots where they reposed (सयाखान), and the banks of rivers, lakes, etc., damaged by them (ज्ञाचा रोट्सेन). The captors passed along the ' Vide Bhattasyámi's Commentary. lines of भगानको trees (Semecarpus anacardium), called Bhelå (भेजा) in Bengali. One of the reasons for this was perhaps that the trees, being very shady, afforded a good resting-place for the animals, where the herds or clues to their wanderings were most likely to be found. It is also possible that the leaves and branches of the trees formed a favourite food of the animals, for भगावक is mentioned as a medicinal plant in the extant works¹ on डख्यावृत्तेंद and चच्चापक alike, the properties of which, according to medical authorities (quoted in *Elephants and their Diseases*, by Lt.-Col. Evans, p. 144), are mainly those of a stimulant, and admit of both internal and external uses.

The exact devices that were employed for catching the elephants are not described in the Arthasâstra, but an extract from Megasthenes

> ¹ क्षमयो यदि वाले स्युर्जाता भक्षातर्केः सद्द विपाच्च सार्षपं तेलं ख्णाष्टं चपयेद्व्वणे । —ह्त्त्यायुर्वेदः, by पालकाप्यसुनि, p. 208. मधुकं केष्टरं पर्च भक्षातकविभीतकम् प्रक्वपुष्पं रुह्वा सारं समभागेन मित्रितम् कासात्तेस्य समुह्तिष्टः झायोऽयं चिफलाताकः जताह्वद्दकिः सद्यस्या कायाग्निदीपकः । — च्याह्ववर्द्धकम, by नक्कल, p. 58; see also p. 54 (ibid.).

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bearing on this point is worth quoting. It runs as follows :---

"The manner of hunting the elephant is this. Round a bare patch of ground is dug a deep trench about 5 or 6 stadia (a stadium=2021 yds.) in extent, and over this is thrown a very narrow bridge which gives access to the enclosure. Into this enclosure are introduced three or four of the best-trained female elephants. The men themselves lie in ambush in concealed huts. The wild elephants do not approach this trap in the daytime, but they enter it at night, going in one by one. When all have passed the entrance, the men secretly close it up; then, introducing the strongest of the tame fighting elephants, they fight it out with the wild ones, whom at the same time they enfeeble with hunger. When the latter are overcome with fatigue, the boldest of the drivers dismount unobserved, and each man creeps under his own elephant, and from this position creeps under the belly of the wild elephant and ties his feet together."-Megasthenes, Bk. III. Fragment xxxvi.

The sources of supply of elephants in those days were the following places, viz. : (i) कांचज, (ii) चज, (iii) करूम¹ (eastern portion of the district of Shahabad in Behar), supplying elephants of the best quality; (iv) माच (the east), (v) दमान,² (vi) चपरान ³ (western countries, viz. Konkan and Malabar), supplying elephants of medium quality; and (vii) जराष्ट्र (Guzerat),

¹ N. L. Dey's Geogr. Dict.

² द्र्यार्न has been identified with modern Mandasore.

³ Vide N. L. Dey's Geogr. Dict.

(viii) पद्यजन,¹ supplying elephants of inferior quality.

STABLES.

There were two sets of stables, one in the fort and the other outside; in the former were kept those elephants that had already been trained for war and riding, and in the latter those that were being tamed, together with the refractory ones.

An elephant stable was twice as high as the length of an elephant, and its width was half its height; it was made to face either the north or the east, had separate apartments for female elephants, had a spacious corridor ($\pi\pi\pi$), and was provided with smooth, square, T-shaped tether-posts called $\pi\pi\pi$, which were as long as the length of an elephant, and between which were placed apertures for the removal of excreta. Their place for sleeping was similar to that for standing, with this difference, that in one half of it was a raised platform for the elephant to lean upon.

¹ पश्चजन probably stands for पश्चगण, a place in Northern India, which is referred to in the Mahabharata, Sabha Parva, ch. 27, in connexion with the Northern conquests of Arjuna, thus: किरीटी जितवान् राजन् देशान् पश्चगणांखत: ॥

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Stabling staff.

For the stabling of elephants a good number of officers was employed. A list of such officers set forth in the Arthaisastra mentions the following: (i) चितिसक (elephant doctors); (ii) चनीकच (elephant trainers); (iii) चारोदक (ordinary drivers or mâhuts); (iv) चाघोरण (expert mâhuts able to control the pace and movement of elephants); (v) चाघोरण (grooms or elephant keepers); (vi) चोपचारिक (attendants); (vii) निषापाचक (cooks); (viii) यागणिक (grass suppliers); (ix) पादपाणिक (those who put fetters round their feet); (x) कुटोरच (guards); (xi) जपणाचिक (those who take care of the elephants at night).

These officers were given wages and allowances of food, and a deduction was made from their dues for negligence in their duties, *e.g.* allowing a stranger to ride the elephants, striking them in the vital parts of their bodies, not cleansing the stables, etc.

Daily routine.

Their bathing hours were fixed once in the morning between 6 and 7.30 and again in

the afternoon between 3 and 4.30. The two bathing hours were followed by hours for meals. The forenoon was the time for their physical exercise, and afternoon for their training. Two out of the eight parts of the night were spent in sleep (चन्न) and three in drowsiness (पंवेसनीखानिक).

Rations.

The quantity of ration to be given to an elephant was regulated generally according to its age, which was inferred from its size and other physical features; and for this purpose elephants were divided into three groups, viz. :—

(i) those that were 14 feet high, 18 feet long, and 20 feet in girth, and were from these measurements inferred to be of forty years of age; (ii) those that were thirty years old; and (iii) those that were twenty-five years old.

The diet for the second group was onequarter less than that of the first; and the diet of the third group was one-quarter less than that of the second.

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The dietary of the first group comprised the following :---

Quantities.					M. James and States
Quantities.					Modern equivalents.
1 drôna of rice (तण्डुल)					4 ₅ chataks.
1 adhaka of oil (ते स)	•		•		1] chatak.
3 prasthas of ghee (सपिष)	•				33 kanchas.
10 palas of salt					4 ₅ sikis.
50 palas of मांस, i.e. fleshy par	ts o	r p	ulp	of	
			_		1 chatak 4 sikis.
1 âdhaka of रम (drink) or)	-				1‡ chatak.
2 âdhakas of curd	SI	÷.		•	15 011000011
10 palas of sugar (TIT) for 1	naki	ng	foo	bđ	
palatable	15		2		4 4 sikis.
1 âdhaka of liquor (मद्य) or	264	88			
2 âdhakas of milk (पय:)	5.7/	03	•	•	1 ₁ chatak.
2 bhâras of meadow-grass (यवस)	219	9			6 seers.
5 ,	10.1	Ľ.,	•	•	
21 bharas of no (sporting-grass)		· ·	•	·	6_4^3 seers.
$\frac{1}{6}$ bhâra of hay \ldots	CO.	20		•	‡ seer.
And any amount of stalks of v	ario	IS S	orts	i of	f pulse.

And any amount of stalks of various sorts of pulse.

l prastha of oil $(1\frac{1}{5}$ kancha) and $\frac{1}{3}$ prastha of the same $(\frac{3}{4}$ siki) were given respectively for rubbing the body and the head with, and $\frac{3}{4}$ prastha for a light in each apartment (π ϵ 1

An elephant of 16 feet in height, and in rut, was given the same amount of food as one of 14 feet, and the rest when in rut were given food according to their size. A young elephant captured for sports (fag) was fed on milk and meadow-grass.

STUDIES IN

TRAINING OF ELEPHANTS.

It was one of the most important duties of the superintendent of elephants to see that proper training was given to the animals under his charge by expert trainers. The elephants were divided into the following four classes according to their training:—

(i) दम्स (those that were being tamed); (ii) पात्राद्ध (those trained for war); (iii) जपवाद्ध (those trained for riding, etc., in times of peace); (iv) बाज (those that were refractory and difficult to be broken).

The taming of elephants had several clearly marked out stages.

The process began when the animal was brought to attach itself to a herd of tamed elephants, and lost its wildness by contact with them; this was called the $\frac{1}{2}$ units (*juthagata*) stage of the training. Then the animal was eleverly thrown into a pit specially dug, to subdue its ferocity; this was the $\frac{1}{2}$ units for $\frac{1}{2}$ (*apapâtagata*) stage. The next step in the taming ($\frac{1}{2}$ to $\frac{1}{2}$ units $\frac{1}{2}$ The next disciplinary measure was to tie the animal to a post when it was found to be sufficiently gentle for the purpose (कामगत--stambhagata). The taming was completed when the elephant became so gentle that it allowed its driver or trainer to sit on its withers without protest; this was the कामगत (skandhagata) stage.

Of the elephants tamed in the above way some were selected for military training and some for purposes of ordinary work.

As regards military training, the preliminary steps adopted were to accustom the elephant to girths (कच्चाकर्म) and collars (पैवेधकर्म) and to co-operation with a herd in a common work (युषकर्म). Then the animal was taught the following movements necessary for war :---

(i) जपस्तान (rising, bending, jumping over fences, etc.); (ii) चंनभैन (turning); (iii) चंयान (moving forward straight or transverse, or making serpentine movement); (iv) नघायघ (killing and trampling down); (v) इत्सियुद्द (fighting with other elephants); (vi) नागरायच (assailing forts and cities); and (vii) चांयानिक (other cognate movements relating to war).

With regard to the training of elephants in

riding, they were first taken through the preliminary processes of discipline, through सारदनमं,¹ जीननमं or drudge-work, and नारोष्ट्रनमं or responsiveness to signs. Then they were trained in the following movements, viz. :---

(i) भाचरण (nimble motion); (ii) कुछरौपवाछ (being mounted from another elephant); (iii) घोरण (trotting); (iv) भाषानगतिक (moving with two or three legs); (v) यद्यप्रवाद्य (readiness to be driven by means of a stick only); (vi) तोचोपवाछ (submitting to an iron hook); (vii) घादोपवाछ (readiness to be driven by mere signs); and (viii) मागेषुक (being trained in hunting).

Lastly, there were those elephants that were regarded as the failures of training. Their viciousness generally consisted in aversion to work, obstinacy, perversity, unsteadiness and bad temper. There were three classes of such elephants, viz.: (1) suddha, having unmitigated

¹ Bhattasvâmî has explained सारद्वमं as the process by which elephants unfit for work owing to excessive fatness or leanness, or other defects, were rendered useful. The word सारद also occurs in the सरसायुव्वेद of पालकायमुनि, p. 49, to denote elephants that were weak, naturally, or through some disease or effect of medicines :

> प्राक्षतः शारदो यथ अप्तधातुचयासया प्रकृत्या याधिभिभाषि दुर्व्यस्थीपधैरपि ।

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viciousness; (2) suvrata, clever at mischief; and (3) vishama, i.e. having vices of all types. The only way to keep them under control was by punishment and the use of fetters and other means to control their vicious tendencies. For these purposes there were in use bridles (पारायप), leg-chains (परिचेप), frontal fetters (जनर), hooks (घड्रम), and other mechanical devices.

ORNAMENTS.

Among the ornaments of elephants are mentioned necklaces such as वेजयन्गी, चुरप्रमाज, as well as housings (चाजरण) and howdah (कुथ); and among war accoutrements are mentioned mail-armour (वर्षा), clubs (तोनर), quivers of arrows (गरावाप), etc.

सत्यमेव जयते

MEDICAL TREATMENT.

As in the case of cows and horses, there were doctors employed to apply medicines to elephants suffering from diseases due to overwork, rut or old age. Their chief duties were, however, preventive in their character taking care that the physical conditions surrounding the life of the elephants conformed strictly to the rules of hygiene and sanitation (सामग्रदि). Failure to take the necessary steps for the health of elephants was punishable with fines. There was also inspection as regards the proper growth and harmonious development of all the parts of the body of an elephant. This was regulated according to several standards and types of its physical development.

There were also certain rules for the cutting of tusks of elephants. Elephants born in countries irrigated by rivers had speedy growth of tusks, which were cut once in two-and-a-half years; and for mountain elephants, whose tusks grew more slowly, it was done once in five years. The rule was to leave at the root a length equal to twice the circumference of the tusk measured at its base.

CEREMONIES FOR THE WELFARE OF ELEPHANTS.

Ceremonies were observed to propitiate unseen agencies for the welfare of elephants. Thus, writter or the waving of lights was performed thrice daily in the rainy season and at the periods of conjunction of two seasons. Sacrifices to $Bh\hat{u}tas$ were also performed on CH. IV.] ANCIENT HINDU POLITY 67

new-moon and full-moon days, as also to चेनानी or Kârtikeya, the god of war.

We have now completed our account of the Department or Live Stock in Chandra Gupta's Government, and have seen the comprehensive character of its scope and work touching the welfare and growth of the useful animals on which depended to a great extent both the economic prosperity and political security of the country.



CHAPTER V.

MEANS OF COMMUNICATION.

§ 1.—LAND ROUTES AND CONVEYANCES.

CONSIDERING the vast extent of the empire of Chandra Gupta, embracing as it did the whole of Northern India from the Bay of Bengal to the Arabian Sea, an area wider even than that of British India, it is evident that the machinery of government by which the administration of this mighty empire was carried on was highly elaborate and developed, the product of evolution through centuries. It implied the existence of all the principal factors on which depends the efficiency of such governments, viz., a well-disciplined army of sufficient strength, a well-organized system of administration, and a well-developed system of communication by which the heart of the empire was brought into constant and vital connexion

with its distant and various parts. We shall have occasion to speak in another place of the organization of Chandra Gupta's army and administration. In the present chapter we shall confine ourselves to an account of the means of communication that existed in Chandra Gupta's time, the network of roads, trade routes and water routes, etc., that, radiating from the centre at Pâțaliputra towards the four quarters of the empire, covered up the entire territory embraced by it. Among the principal agencies of transport, we shall have to refer to vehicles and conveyances as also to ships and boats which established and carried on the intercourse not only between the different parts of the country along the recognized water routes, but also the intercourse of the empire with the outside world across the seas.

As already pointed out, the trade routes led towards all the four quarters of the empire--north, south, east and west, as is apparent from the passages quoted below. The number of routes in each direction seems to have been determined by consideration of traffic. From this standpoint Kautilya regards the routes leading to the south as more important than those leading to the Himâlayas; for while the latter brought to market the supply of blankets, skins and horses, the former facilitated the supply of such valuable commodities as diamonus and other precious stones, pearls, gold and conch-shells, of which Southern India was the noted home for ages. On the same considerations it is also stated that of the southern trade routes the more important were those that passed by a larger number of mines, carried a larger volume of traffic in merchandise of various kinds, and were hence used by a larger number of men. There were also other routes leading to the east and to the west, the importance of which was also determined as above.1

One of these routes was undoubtedly what has been mentioned in Megasthenes as the "Royal Road"² connecting Pâțaliputra with

¹ स्वलपथेऽपि----'' हैमवतो दचिषापषाच्छेयान् इस्त्यञ्च-गन्थ-दन्ता-जिन-रूष-सुवर्ष-पखास्तारवत्तरा: ''---(इत्याचार्य्याः)।

² Megasthenes, Bk. IV, Fragment lvi.

the Indus valley, and enabling the power of Chandra Gupta to be felt even in the regions of the North-Western frontiers which had been newly wrested from the hands of Seleucus Nikator.

But roads and trade routes¹ had a political importance besides an economic. To have control over them meant over-reaching the enemy. They were the means of transport of troops, messengers, envoys, as well as weapons, armour, chariots, pack-animals, etc.

Roads and trade routes were of various kinds, with various designations. They were classified (1) according as they were used by beasts of burden, men on foot or in conveyances, and (2) according to the destinations they led to. Thus, the **thermal**² (4 dandas or 32 feet wide) was the king's highway. It owed its

¹ वर्षिक्पथः परातिसञ्थानस्य योनिः ; वर्षिक्पथेन डि ट्ण्ड-गूड़पुरुषातिनयनं श्रस्तावर्णयानवाइनक्रायस्व क्रियते । प्रवेशो निर्णयनं च ।—Bk. VII, डीनश्क्तिपूर्णम्, p. 805; सप्रतिविद्ति यानवाइनपुरुषपरिवाप: प्रतिष्ठेत, etc.—Bk. I, टूतप्रणिधिः, p. 80.

² निर्याणेऽभियाने च राजमार्गसभयतः छतारचं दण्डिभिरपास-ग्रस्तक्समप्रत्रजितव्यक्नं गच्छेत्। न पुरुषसम्माधमवगाहेता — Bk. I, आक्षरचितकम्, p. 45; चयः प्राचीना राजमार्गास्तय उदीचीना इति वास्तुविभागः । — Bk. II, दुर्गनिवेग्रः, p. 54.

name evidently to the fact that the king used it on solemn occasions, when it was cleared of crowds and guarded by soldiers with drawn swords. There used to be six such roads ir a city, three running north and south and three east and west. Two was the broad road, 4 dandas or 32 feet wide, along which chariots could run with ease. There is also mention of a रचपच, apparently for smaller chariots, as it was only 5 aratnis or 10 feet wide. The पद्मपय, having a width of 4 aratnis or 8 feet, was the road for cattle in general, while there were the सहापग्रापथ for the larger animals, and the जुद्रपद्मपद for the smaller ones, having a width of 2 aratnis or 4 feet.¹ There were routes called खरोट्रपथ (lit., for asses and camels). They were so made that they could be used whatever the season or the nature of the soil through which they passed. Besides the aforesaid roads, there was also distinguished a चन्नपथ (cart-track) which admitted of a larger volume of traffic than the पादपथ, and the मन्ष्यपथ

¹ It should be noted that these roads took their names from the principal uses for which they were meant. It must not be thought that a road for the purpose which its name implies was not put to any other use for which it was fit. (2 aratnis or 4 feet wide) meant for pedestrians only. The चंत्रपथ was a narrow road of the latter class.¹ Of these roads and routes some have been singled out in the Arthasastra as trade routes proper (वरिष्क्षथ). These are the चन्नपथ, पादपथ, चंत्रपथ and खरोड्रपथ. The reason of this distinction seems to be that the trade routes were usually of very great length and passed through a variety of soils and climes.

As has been already mentioned, there was also a class of roads that were designated according to their destinations. The राष्ट्रपष (4 dandas or 32 feet wide) was the road leading to the districts. The road leading to pastures was known as नियोगपष, and was of the same breadth. The approaches to the forts in the centre of 400 and 800 villages were known respectively as द्रोणगुषपष and षानोषपष, and were of equal breadth with the preceding.² The पगोनीषपष led to the fields

¹ दुर्गनिवेश:-Bk. II; विवीतत्तेचपथहिंसा-Bk. III; and कर्मांसन्थि-Bk. VII; तचापि चुक्रपाट्पथयो चक्रपथो विपुला-रभालाच्छेयान् देशकालसभावनी वा खरोष्ट्रपथ: खाभ्याम् चंसपथो व्याख्यान:-Bk. VII, कर्मांसन्थि: ।

² चष्टश्तयास्यानध्ये खानीयं, च तुप्रश्तयास्या दोषसुखं, द्विशत-यास्या खार्वटिकं, दश्यानीसंग्रहेण सङ्ग्रहणं खापयेत्।

-Bk. II, जनपद्निवेगः: ।

under cultivation (योनि=seed or grain). The road leading to a military station was called the यूडपय. The माधानपय, as the name indicates, led to the cremation-grounds, while the पामपय was a thoroughfare which led to and through a village. The above four classes of roads were all 8 dandas or 64 feet wide. The paths to forests were known as यनपथ (4 dandas or 32 feet wide), and those leading to elephant forests were called इचियपथ (2 dandas or 16 feet wide). The roads leading to or passing over elevated and difficult places like embankments were designated as चेत्रपथ (4 dandas or 32 feet wide).¹

Besides the above classes, there are mentioned a few other roads peculiar to $forts^2$:---

(i) रषचयांगचार, *i.e.* roads for chariots, paved with planks cut from the trunks of palms, or with broad and thick slabs of stones. (ii) प्रतोची, which was a broad passage between two towers (घटाचक). (iii) देवपथ, which was the passage leading to a temple. (iv) Paths which were as broad as a danda (8 feet) or two and were called चार्या.

> ' दुर्गनिवेश:--Bk. II. ° दुर्गविधानम्--Bk. II.

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Among other minor roads may be mentioned the waw a defile or small path admitting passage for a single man.¹ जपाध is a small passage through fields,² etc., and चिरिष्या³ a road in the city on which the workshop for the State goldsmith was built.

The free flow of traffic along the established roads and trade routes was naturally one of the cares of the State, and all interference with it was punishable. Suitable fines were imposed for blocking passage, which varied with the importance of the roads.⁴ The fines for blocking or digging some of the roads mentioned above are thus laid down in the Arthasâstra : for चुद्रपद्मपद and मनुष्प्रथ, 12 papas; for महापद्मपद्म, 24 papas; for हजिचेत्रपथ, 54 papas; for महापद्मपद्म, 24 papas; for इजिचेत्रपथ, 54 papas; for चेतुपथ and वनपथ, 600 papas; for समानपथ and पामपथ, 200 papas; for दोषजुखपथ, 500 papas; for खानोयपथ, राष्ट्रपथ and दिनोत्तपथ, 1000 papas; for खानोयपथ, roads too deep, four times the above fines were inflicted.

We now proceed to give an account of the

¹ ग्रस्ताग्निरसप्रणिधय:, वीवधासारप्रसारवधच-Bk. XII, p. 388.

- ⁸ अच गालायां सुवर्णाध्यच:-Bk. II, p. 85.
- * विवीतचेत्रपर्यादंश--Bk. III, p. 171.

² वास्तुविक्रय:-Bk. III, p. 169.

various types of vehicles, conveyances and other means of land carriage which were then in use. First come chariots, the construction of which was placed under the supervision of the superintendent of chariots (रथाधच), who had to see that the chariots built corresponded with the various sizes and types in vogue; for there are mentioned no less than seven different sizes of chariots with a normal height of 10 purushas, i.e. 10 feet, but with a width ranging from 6 to 12 feet. There are also mentioned six varieties of chariots for different purposes. Thus the देवरघ was the chariot for the idols. the yuva was the festal chariot. the सांग्रामिक war-chariot, the used ordinarily for travelling. There was another class of war-chariots called the परपुराभियानिक for use in expeditions. Lastly, there was the वेनचिक or the chariot used in the period of training.1

Among minor vehicles² we have the जघुयानम, a small cart; the गोच्डिकम, a cart of medium size drawn by bulls; and the मकट or big cart.

¹ रषाधच:—Bk. II.

² चुद्रपग्न मंगुष्यच सभारो माषकं द्यान्; पश्च लघुयानम्, षड़-गोलिङ्गम्, सप्त ग्रकटम्—Bk. II, नावध्यच:, p. 127. The carts were in very general use, and a brisk trade in them was carried on to meet the demand.¹

The chariots carts² and other vehicles were usually drawn by camels, bulls or horses. The cart-driver was called **πππτ**.³

Lastly, the fमाचिका⁴ or palanquin was also a means of conveyance, पोडिका being another variety of the same.

As regards the king's conveyance, great precautions were taken to ensure his personal safety when he rode a horse, etc., or was carried in a chariot or other vehicle. Hereditary grooms and drivers were generally appointed, and stringent punishments meted out to those who stole or caused hurt to royal

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¹ धान्यरचलोच्दपर्खाः शकटव्यवचारिणच चिंग्रत्कराः-Bk.V, कोशाभिसंदरणम्, p. 241.

² गवाख-रघोष्ट्राणां च वजः---Bk. VII, डीनग्रक्तिपूरणम् । युगवाडनग्रकटवत्ता टघभाः----Bk. II, गोध्यचः । कुर्यान्नवाञ्चव्या-योगं रघेव्वत्यडयो नृपः-----Bk. X, युद्दभूमयः, पत्यच्चरण्डसिकर्माणि च, p. 869.

ै चक्रचराणां वा एकट-वाटे-रपगच्छेन्-Bk. VII, सन्धिकर्म, सन्धिमोचच, p. 315.

⁴ क्रचभृङ्गारवजनशिविकापीठिकारचेष च विशेषार्थम्—Bk. II, गणिकाध्यच:, p. 123.

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horses and elephants, and damage to royal carriages.¹

There were rules for the driving of vehicles to ensure the security of the passers-by. 1 need not, however, enter into these details.² Cart-stealing was severely punished.³ Special⁴ care was taken for repairing the roads, and favour was shown to the labourers by exempting them from taxes.

I conclude this account of land routes and conveyances by a reference to the facilities for travelling that were offered by the State. The supply of water and shade was one of the concerns of Government. Trees were planted along the roads, and water-storages were set up, ministering to the comfort of passers-by. There was also provision made by hotel-

 मोलगुरषाधिष्ठितं यानवाइनमारोडेत---Bk. I, आवारचित-कम्; (पथि) राजहत्त्यअरणानां डिंसकान् सेनान्ता घ्रालानारो-इयेयः---Bk. IV, ग्राइसिवस दण्डकल्प:, p. 227.

² Vide Bk. IV, **खतिचारद**ण्ड: ।

शोधयेत् पग्नासक्वैंच चीयमानं वणिक् पर्य---Bk. II, जनपद-निवेग्न:, p. 49; सधमवरं वा दुर्गसेतुकर्मवणिक् पण्नप्रज्यनिवेग्न-खनिद्रव्यक्वसिवनकर्मोपकारिणं प्रत्यन्तमस्पप्रमाणं वा न याचेत----Bk. V, कोग्राभिसंहरणम्, p. 240.

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keepers for the supply of food and restingplace to travellers.¹ These facilities anticipated those of Asoka as set forth in his Rock Edict II.

§ 2.—WATERWAYS AND SHIPS AND BOATS.

From the above it appears that the vast territories over which Chandra Gupta held sway were interconnected by a system of communications, which was one of the chief means of welding them together into one mighty empire governed from its centre at Pâțaliputra. The means of communication thus established had, as I have already said, not merely a political significance; they helped to create and carry a large volume of inland trade which was equally instrumental in uniting the different parts of the empire in ties of common material interests.

The system of communications, however,

¹ तुत्त्वशीसपुं असीप्रापाविक-कथावकाशभोजनदार्हाभः अप-सर्पचेत्----Bk. IV, वाव्यकर्मानुयोुगः, p. 219. सद्दोदकं चाद्दार्योदकंवा से तुं कअयेत्। चन्येषांवा वध्नतां

सहोदनं चाइार्योदनं वा से तुं बन्धयेत्। चन्धेषां वा बध्नतां भूमिमार्ग-ष्टचोपकरणानुपद्दं कुर्यान् पुष्प्रस्थानारामाणां च सभूय से तुबन्धादप्रकामतः नर्म्यकरब्सीवर्दाः नर्म्यकुर्युः—Bk. II, जन-पदनिवेधः:, p. 47; पुष्पफलवाटषण्डकेदारमू झवापास्ते तुः—Bk. II, समाहर्न् समुद्दप्रस्थापनम्, p. 60. could not be complete without the means of water-carriage, which in India pre-eminently the land of rivers, were imperatively necessary. That these were fairly developed is quite evident from the Arthasâstra; in fact, all matters relating to navigation, whether inland or oceanic, were dealt with by a separate admiralty department managed by various officers.

There were several classes of water routes: first, the ordinary river routes and the artificial waterways or canals (कुखा) which were greatly resorted to by traders on account of the undoubted cheapness of water-carriage. Kautilya, however, shows his preference¹ for land routes over water routes on account of the lesser risks involved in the former. Secondly, there were the routes for coastal traffic (क्रवपय)

कौटिन्धः----- '' वारिखलपथभोगयोर्गनत्यो वारिपथभोगो, नि-त्यखलपथभोग इति ''।----Bk. VII, चनवसितसन्धिः, p. 294. carrying on inter-portal communication. These were naturally more exposed to dangers than either the river routes or the land routes. Lastly, there were ocean routes ($\forall \forall 1 \neg 4 \forall 2$) carrying on the intercourse of India with foreign countries across the sea. The existence of definite ocean routes, clearly marked out, no doubt implies a high degree of development of the art of navigation.

The natural risks of water-carriage were, however, overcome by the efficiency of the means of transport that were in use. Ships and boats were built of various descriptions suiting the purposes of both inland and marine navigation. In the Arthasastra mention is made of the following kinds of ships and boats:--

(i) संयात्वः नावः, *i.e.* ocean-going vessels. These ships had to pay tolls (ग्राक्त) at the harbours (चेन) at which they touched.¹ Amarakosha defines a सtयानिक as a merchantman (पोतनयिक).

(ii) प्रवद्त्य: This is another name for seagoing vessels, or more properly merchantmen, for it is thus defined in the commentary on

-Bk. II, नावधव:, p. 126.

¹ संयातीनीवः चेचानुगताः ग्रुक्तं याचेत ।

उत्तराध्ययनस्त्रवटीका, p. 246: सामुद्रिका: यापारिण: महासमुद्रं प्रवष्थेसरन्मि, *i.e.* "sea-going merchants cross the main in प्रवच्च."

(iii) मङ्गुझामारिष: नाव: These-were the boats used for pearl-fishing in various parts of the ocean. They were generally the property of Government, but were also let out to private individuals on payment of the necessary fee (नोषाटक). But pearl-fishers were also allowed to carry on their business in their own boats (खनाव:).²

(iv) महानाव: These were big vessels for use in those large rivers (महानदीषु) which could not be forded even in the dry seasons and were navigable throughout the year.³

(v) The royal barge was another type of boat, manned by trustworthy sailors (चात्रना-विकाधिष्ठितः नी:). It had to be tagged on to another boat, evidently for the safety of the king. The king never used a vessel that had

¹ प्रवद्धणनिमित्तमेकोऽमात्यः सैवानमात्यानावाद्वचेत् ।

-Bk. I, जपधाभि-श्शीचाशीचज्ञानसमात्यानास्, p. 17.

² प्रङ्वभुक्ताग्राहिणो नौहाटकान् द्यु, खनौभिर्वं तरेघु: । ----(नावधघ:) ।

⁸ महानावो हेमनाप्रीसातार्थांसु महानदीषुप्रयोजयेत्।--Ibid.

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once been weather-beaten, and, as a further precautionary measure, soldiers were stationed on the bank or shore when he boarded a vessel.¹

(vi) चुड़का: भाव: These were small boats specially meant for use in small and shallow rivers (चुड़िकाद्य) that overflowed in the rains.²

(vii) खनरपानि Besides the Government ferryboats, there were also ferry-boats belonging to private persons. These were allowed to cross the rivers at all times and places.³

(viii) चिंचिका: These were the pirate ships and boats. The admiralty regulation was that they should be pursued and destroyed whenever they were found. The same regulation applied to the ships and boats of an enemy's country when they crossed its limits (चमिचनिय-यानिगा:) and also to vessels violating harbour rules (पच्चपत्तचारिजोपधानिका:).⁴

' नावं चाप्तनाविकाधिष्ठितासन्यनीप्रतिवदां (चारोडे त्); वातवेगवर्शांच नोपेयात् । उटकान्ने सैन्यमासीत ।

-Bk. I, चातारचितकम, p. 44.

² चुद्रका: (नाव:) चुद्रिकासु वर्षाखाविणीषु ।—(नावर्ध्यच:) । ³ Ibid.

* चिंचिका निर्धातचेत् । चमित्रविषयातिगाः पण्णपत्तनचारि-जोपधातिकाच---(नावधचः) । A reference has now to be made to the crew for manning ships and boats. The captain of a ship was called the मापक, and the steersman the नियामक. There were also the sailors, with sickles and ropes, known as दापरसिमाहका:. Lastly, there was a staff of sailors whose duty it was to bale out water (उन्दे चका:).¹

Besides the regular ships and boats, there were devised various other means of watercarriage. These were (a) काउचड्यान—pieces of timber tied together, serving the purposes of a boat; (b) वेषुचड्यान—a boat made of bamboos tied together; (c) चर्चान—a vessel made of the bottle-gourd; (d) चर्चाकरण्ड—a basket covered with skin; (e) चर्चान—a leather bag that could be floated and used as a boat; (f) जन—canoe; (g) गण्डिका—a floating device made of the leather of the rhinoceros; (h) वेषिका—a float of reeds, etc., woven together.²

Other means² of crossing water were the bridges of various kinds. Besides the ordinary

² इसिसभभर क्रमसे तुब अनीका छवे एसङ्घार्त: ज्वला वुचर्म्मक-रण्ड इत्तिग्नवगण्डिका वेणिक भिन्नोदकानि सार्यन्-Bk.X, स्क्रआ-

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bridges (चेत्रक) there were also the bridges of boats as well as the bridges formed by elephants standing in a row.

In the chapter नावधन: there are a few rules relating to the duties of the नावधच (the superintendent of the admiralty department), of the unuu (the superintendent of oceanmines) and of the पत्तनाध्वज्ञ (the superintendent of ports). There are also mentioned the regulations as to the collection of taxes and ferry charges (गरदेय), repair of ships and boats, time and place for crossing rivers, entrance of foreign merchants into the country, arrest of suspected persons, and concessions made to some classes of persons as regards crossing and ferry fees, e.g. children, old men, etc.

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यारप्रयाणम्, p. 363; वर्षारात्रसनूपपामाः पूरवेसामुन्द्रव्य वसेथु:। काष्ठवेणुनावचापग्टह्लीथु:--Bk. IV, उपनिपानप्रनीकारः, p. 206.

उच्चमानमलान्इत्तिक्षनगण्डिकावेणिकाभिस्तारयेयु: । अनभिस-रतां द्वाद ग्रपणों दखः, अन्यत्र सवहीनेभ्यः ।—Bk. IV, उपनि-पातप्रतीकार:, p. 206.

नदीद्र्गं दि इसिसमासङ्ग्रमसेतुबन्धनीभिसाधमनित्यगाभीर्थ-सपखायुदवं च-Bk. VII, भूमिसन्धि:, p. 292.

शिविरमार्गसेतुकूपतीर्थशोधनकर्मायन्त्रायुधावरणोपकरणयास -वच्चनमायोधनाचं प्रदरणावरणप्रतिविद्वापनयनसिति विष्टि-कर्माणि-Bk. X. पत्यचर घहालिकर्मान्गिच, p. 369.

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Besides these, there were a few other rules regarding deposits in ships, the rate of interest for money lent or borrowed by sea traders $(\forall 1\forall \forall t$) and the punishment for stealing boats.¹

It is apparent from the above that intercourse was established in that ancient time between the empire of Chandra Gupta and very distant places. That foreign merchants used to come to his empire and that commerce was carried on with distant countries are evident from references made to them in several passages under the names of पारविषयिका:², षासुद्रा:,³ साथैयानपात्रानि,⁴ and also by the use of such expressions as "देशकाज्ञान्तरितानां ज पद्यानt,"⁵

ा नाविनिभयायां मुणितायां खयमुपरूढ़ो नोपनिधिसभ्याभवेत् ---Bk. III, भौपनिधिकस्, p. 177; विंशतिपणा सामुद्राणां । ततः परं कर्मुं: कारयितु स पूर्व्यसाइसट्ण्डः---Bk. III, ऋणा-दानस्, p. 174; नाविकसार्थवादेभय परिषारसायति चसं द्यान्। भ्वनभियोगयार्थवागमूनासन्यत्र सभ्योपकारिभ्यः----Bk.II, पण्डाधचः, p. 98.

चक्रयुत्तं नावं चुद्रपग्नुं वाध्यहरत ऐकपाद्यधः चिग्रतो वा इण्ड:---Bk. IV, एकाङ्गवधनिष्ठयः, p. 225.

² Vide नावधाः ।

- ³ Bk. III, च्हणादानम् ।
- · Bk. I, खवरुद्रष्टत्तमवर्द्धे च ष्टति: ।

^b Bk. IV, वैदेहत-रचणम्; see also पण्प्रथच:-Bk. II; कर्म-सन्धि:-Bk. VII, etc. etc. Lastly, in the chapter entitled को सप्रवेश-रतपरीचा in Book II, among other things it is mentioned that का लेपन, a kind of sandal, came from खर्षभूषि, *i.e.* Burma; चीनभूषिजा: चीनपदा:, fabrics of Chinese manufacture, came from that distant country; and gems of various kinds, as well as चगर (the fragrant Aloe-wood) of several sorts, came from Ceylon (पारचयुन्न).¹ There are mentioned many other names of distant countries the products of which were brought into the empire by the means of intercourse that were established, but those already quoted are sufficient for our purpose.

¹ Mr. N. L. Dey has very rightly restored the word *Palæsi*mundu of the *Periplus of the Erythræan Sea* to its proper form as *Pårasamudra* (η_{1} , η_{R}) in the second edition of his *Geo*graphical Dictionary of Ancient and Mediaval India, the manuscript of which he has kindly allowed me to consult. His restoration of the word is confirmed by Bhattasvâmi's Commentary, which says that the fragrant Aloe-wood, called Pårasåmudraka after the place where it grows, is obtained in Sinhala (Ceylon).

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CHAPTER VI.

MINOR WORKS OF PUBLIC UTILITY.

In the previous chapters has been described the field of activity covered by some of the major works of public utility. In the present, an account will be given of some of the minor measures that were adopted, and the institutions that were established, for the promotion of the welfare of the people in certain special directions. These, roughly speaking, were connected with the relief and alleviation of sickness, poverty and distress, as well as with the patronage and encouragement of merit.

MEDICAL AIDS, SANITATION, ETC.

It is well known that in ancient India, as far back as the age of Buddha, much progress was made in medicine and surgery, which were fast being applied to the relief of human

suffering. "According to the Indian tradition preserved in the Buddhist Jâtakas or Folklore, there existed in India in the age of Buddha two great universities or seats of learning, in which 'all sciences,' including medicine, were taught by 'professors of world-wide renown.' These two universities were Kâsî or Benares in the east, and the still more famous Takshasilâ or Taxila (on the Jhelam river) in the west. In the latter university in the time of Buddha or shortly before it, the leading professor of medicine was Atreva. He, accordingly, should have flourished at some time in the sixth century B.C. As one of the names of Susruta's teacher is Kâsîrâja, which literally means King of Kâsî, he may not unreasonably have referred to the University of Kâsî or Benares."1 Jîvaka, the famous physician who was contemporaneous with Buddha, is stated to have studied medicine in the Taxila university under Âtreya.² The Vinaya Pițakas also give us some information on this point.³ "Rules for preparing various kinds of medica-

¹ Hoernle's Studies in the Medicine of Ancient India, pp. 7, 8.

² Rockhill's *Life of Buddha*, p. 65.

³ Vinaya Pitakas: Mahâvagga VI, P-15 and 17-21.

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ments, as well as medical and surgical operations," says Prof. Kern, " are prescribed in the Vinaya, so that we get some notion of the condition of medical science in the period when that part of the canon was composed."1 From these evidences, which are sufficient for the present purpose, we get an idea of the state of Indian medical science as far back as the time of Buddha, or even before it, and the advancement it attained in medicine and surgery. The degree of progress achieved in Chandra Gupta's time will be evident from the measures adopted by his Government to secure the health of his people. We learn from Megasthenes² that of the six bodies that were in charge of the city, one had "to attend to the entertainment of foreigners. . . . They took care of them when they were sick, and if they died buried them." Thus the care and treatment of the sick foreigners formed one of the duties of Government. This shows that physicians, with medicines and appliances, had to be kept in readiness to meet the emergencies. Arrian, moreover, refers to an

¹ Kern's Manual of Indian Buddhism, p. 85.

² Megasthenes, Bk. III, Fragment xxxiv.

interesting incident which reflects no small credit on the Indian physicians of the day. Alexander had in his train several proficient Greek physicians, but they confessed their inability to deal with the cases of snake-bite very common in the Punjab. Alexander was obliged to consult the Indian Vaidyas, who successfully treated these cases. The Macedonian king was so struck with their skill that, according to Nearchos, he employed some good Vaidyas, and ordered his followers to consult them in cases of snake-bite and other dangerous ailments.

In the Arthasastra there are references to four classes of medical experts, viz. भिषजः or चिकिन्मका:, *i.e.* ordinary physicians; जाङ्गीविदः,

¹ उत्तरपश्चिमं भागं पण्णभैषज्यगटडम्।—Bk. II, दुर्गनिवेग्नः, p. 55; सर्पस्तिहधान्यचारसवणभैषज्य ... निचयान् ज्वनेकवर्षो-पभोगसडान् कारयेत्। नवेनानवं ग्रोधयेत्—Ibid., p. 56. See also p. 44, Bk. I, ज्यात्मरचितकम्।

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i.e. those who could readily detect poison; गर्भवाधिषंखाः or स्कृतिकाचिकित्यकाः, *i.e.* midwives; and army surgeons and nurses.¹

The army surgeons with surgical instruments (\mathbf{u} , and appliances (\mathbf{u} , remedial oils (\mathbf{u} , \mathbf{v} , and bandages (\mathbf{u} , and nurses with appropriate food and beverage, accompanied the army, and encouraged the soldiers.² For the treatment of the diseases of animals, there were the veterinary surgeons referred to in the previous chapters on the subject of live stock.

Several steps were taken for the plantation and growth of medicinal plants and herbs. Portions of fields cultivated directly under Government supervision were set apart and used for this purpose. These herbs were also grown in pots.³

Again, in the royal households, all kinds of

¹ भिषज: and जाइलीविद:-Bk. I, चात्मरचितकम्, p. 43; गर्भवाधिसंखा:-Bk. I, निशान्मप्रणिधि:, p. 41; स्ट्रतिकाचि-कित्सुका:-Bk. II, नागरकप्रणिधि:, p. 146.

² चिकित्सका: एसयन्त्रागद्खेड्यसहस्ता: सियसाइपानरचिन्य-पुरुषाणामुद्दर्षणीया घष्ठतसिष्ठेयु: ।---Bk. X, क्रूटयुद्धविकस्पा:, etc., p. 867.

³ Bk. II, सीताध्यच:, p. 117.

medicines useful in midwifery were kept, and the well-knowr medicinal herbs were grown in pots. Specified plants were also planted in the compounds of houses to ward off snakes. Cats, peacocks, mungooses and spotted deer were also kept there for the purpose. The shriek of birds such as mainâ, parrot, etc., which cry out in the vicinity of snake poison, was utilized. The following birds were also kept for their sensitiveness to poison, viz., the heron that swooned, the cuckoo that fell dead, and the partridge that reddened the eyes at the smell of poison.¹

The State controlled and regulated medical practice in the land.² Laws were enacted to ensure that medical practitioners exercised due caution in treatment of patients. Every case of dangerous disease had to be reported to Government, failing which, the physician was fined. There was a penalty attaching to a proved case of carelessness on the part of a physician causing the death of a patient, while the aggravation of disease owing to his negligence was treated very much like a case of

> ¹ Bk. I, निशामप्रणिधिः । ² Bk. IV. कारकर च्यास ।

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assault or violence.¹ Thus the physicians were cautioned against "gathering experience" at the cost of the lives of hundreds of patients.

Measures were also taken for prevention of diseases. Thus, adulteration of all kinds was punished, e.g. adulteration of grains, oils, alkalies, salts, scents and medicines.² The health of the people in cities or crowded places was secured by sanitary measures. Throwing dirt, or causing mire or water to collect in roads and highways was punishable. Committing nuisance near temples, royal buildings and places of pilgrimage, or in reservoirs of water, was penalized, but exceptions were made when this was due to disease or effect of medicine. Throwing inside the city the carcases of animals, or human corpses, was also visited with fines. Carrying dead bodies through gates or along paths not meant for the purpose, as well as the interring or cremation

¹ Cf. S. B. E., Vishnu, v, 175–177; Yåjñavalkya, II, 242; and Manu, IX, 284 — "All physicians who treat their patients wrongly shall pay a fine: in the case of animals, the first or lowest, and in the case of human beings the middlemost amercement." Nårada adds: "But this refers to cases when death is not the result of the wrong treatment; for if that is the case, the punishment is greater."

² Bk. IV, वैदेसकरचयन्।

of dead bodies beyond the limits of the prescribed burial-places and crematories, was also a violation of the sanitary regulations.¹

Remedial measures, medical as well as religious, were adopted to ward off pestilences. In times of epidemic, physicians had to be busy distributing medicines, and ascetics and priests with their auspicious and purificatory ceremonials.²

The precautions taken for the health of the king were as follows:—Medical experts were appointed to detect poison. The medicines that were served out to the king were in the first instance proved as to their purity and then tasted by the physician, the decoctioner $(\Psi I \Psi \Phi)$ and the purveyor together.³

Post-mortem examination (पाछमृतवपरीचा).—It is noteworthy that there was arrangement in those days for post-mortem examination.⁴ For this purpose the corpse was smeared with oil to prevent putrefaction. All cases of violent death caused, for instance, by suffoca-

- ³ Bk. I, चातारचितवन्।
- * Bk. IV, आग्रमुतकपर्कीचा।

¹ Bk. II, नागरकप्रयिधिः ।

² Bk. IV, जपनिपातप्रतीकार: ।

tion, hanging, drowning, etc., or by poisoning, were at once brought to the morgue, and the medical officers in charge had to find out as far as possible the exact cause of death from an examination of the symptoms, several of which are enumerated in the Arthasâstra.-The whole affair was subjected to a careful scrutiny, and if foul play was suspected, evidence was taken and the matter left to be disposed of in the law court.

Before we leave this subject it should be noted that the University of Takshasilâ, where Pâṇini and Jîvaka were taught, must have continued to exist in its pristine glory at the time of Chandra Gupta, teaching the medical science which was included in its curriculum as before. Arrian describes Takshasilâ as "a large and wealthy city and the most populous between the Indus and the Hydaspes." Pliny and Strabo also testify to its vast dimension and populousness. Its high repute as a wealthy city continued for many years after Alexander's invasion,¹ and its importance may be deduced from the fact that it continued to be the

¹ Cunningham's Archæological Survey Report, vol. ii, pp. 112, 113.

capital of the Punjab and residence of the viceroys under the early Maurya kings. Asoka lived here as viceroy during the lifetime of his father. These circumstances, as also the fact that we do not hear of any other university in Western India at the time of Chandra Gupta, confirm the aforesaid view. Though it is not distinctly stated in the Atthakathâ, as quoted by Turnour in his Mahâwanso,¹ that Kautilya, the minister of Chandra Gupta, was taught in the University of Takshasilâ, yet, considering that he was an inhabitant of that town and that he achieved the knowledge of the three Vedas, could rehearse the Mantras and wrote several treatises on diverse subjects, we cannot resist the inference that he must have availed himself of the advantages which the university of his own town, so famous for its teaching in all the branches of learning, could afford.

INSURANCE AGAINST FAMINE, FLOOD AND FIRE.

We shall now turn to the measures taken for protecting the people against the ravages of famine, flood, fire, etc.

¹ Introduction, p. xxxix.

As a general preventive against famine and other such calamities, it was laid down that in the Government store-house only half of the garnered articles should be use 1 and the other half reserved.¹

The king had also special duties to perform towards his people during famine. In the first place, he had to provide them with seeds to secure a good harvest in future. When the famine had already overtaken the people, he started relief work (i) by दुर्गनकर्म, i.e. works given to the famine-stricken for wage-earning, (ii) by free distribution of alms from the store-house referred to above. (iii) by the abandonment of his country to some other king (देशनिचेप), (iv) by taking help from allies, (v) by making the rich contribute to the famine fund, (vi) by temporary emigration with his subjects to a different kingdom with abundance of crops, (vii) by emigrating to the sea-shores or to the banks of rivers or lakes where he founded a new settlement and employed his subjects in growing grains, vegetables, etc., as

¹ Bk. II, कोछागाराध्यद्य: ।

CH. VI.] ANCIENT HINDU POLITY 99 well as in hunting and fishing on a large scale.¹

As a precautionary measure against floods during the rainy season, the people were made to remove from the banks of rivers, etc., in due time. Those who possessed or could procure canoes and other means of safety and escape were enjoined, under the penalty of fines, to give every possible help to persons falling victims to floods in spite of all precautions. Coupled with the above means was the performance of religious and other ceremonials to propitiate the spirits and the gods.²

Measures for the extermination of pests were also taken by Government. These "pests" generally included rats, locusts, injurious birds and insects, and tigers. To destroy rats, cats and mungooses were let loose; some varieties of poison were also used for the purpose. To kill tigers, several kinds of

¹ दुर्भिचे राजा बीजभक्तोपग्टहं छलाऽनुग्रहं कुर्थात् । दुर्गत-कर्म्म वा भक्तानुग्रहेष भक्त शंविभागुं वा देशनिचेपं वा । सिचाणि वा व्यपात्रयेत् । कर्श्वनं वमनं वा कुर्थात् । निष्यव्रस्यसम्यविषयं वा सजनपदो यायात् । समुद्रस्ररसटाकानि वा संत्रयेत् । धान्य-शाकमू छफलावापान् से तुषु कुष्वीति । मृगपग्राव्यालमत्त्यारमान् वा ।—Bk. IV, जपनिपातप्रतीकार:, p. 207.

² Bk. IV., जपनिपातप्रतीकारः ।

poison were in use; sometimes hunters were employed, and several methods of entrapping were also resorted to.¹

There were various regulations to protect person and property from fire. The danger from fire seems to have been very common, considering the material of which the buildings of the period were mostly constructed, viz. wood instead of stone.² Megasthenes informs us that "such cities as were situated on the banks of rivers or on the sea-coast were built of wood instead of brick, being meant to last only for a time, so destructive were the heavy rains which poured down; and the rivers also, when hey overflowed their banks, inundated the plains; while those cities which stood on commanding situations and lofty eminences were built of brick and mud."³ It is also known, on

¹ Bk. IV, **उपनिपातप्रतीकार:** ।

² V. Smith's *Hist. of Fine Art*, p. 13: "Abundant evidence establishes the fact that Indian architects before the time of Asoka built their superstructures chiefly of timber, using brick almost exclusively for foundations and plinths. No deficiency in dignity or grandeur was involved by the use of the more perishable material." The present excavations at Pátaliputra are leading to the discovery of many wooden structures, *e.g.* pillars, platforms, etc. We are anxiously awaiting a corroboration of our views on this point by such findings.

³ Megasthenes, Bk. II,•Fragment xxvi.

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the authority of the same Greek ambassador, that Pâtaliputra, the capital, was surrounded by "a wooden wall pierced with loopholes for the discharge of arrows."¹ Wood seems to have been very extensively used in those days for building and other purposes, and therefore several precautions were taken and several rules laid down governing the use of fire.

During summer, villagers had to do their cooking in the open air, if they were not already equipped with what was called the ten remedial instruments (दग्रमुखीसंपद्त).² These were (i) five water-pots (पद्यवयः); (ii) कुम, a water-vessel of that name; (iii) द्रोपी, which, according to Bhattasvâmî, was a water-tub made of wood and kept at the door of a house; (iv) नित्रेणी, a ladder; (v) पराइ, an axe to cut beams, etc.; (vi) mt, a winnowing-basket to blow off smoke; (vii) were, a hook to pull down the burning pieces of wood; (viii) ay, ropes, etc.; (ix) यच्यी, a basket for removing articles from the store-room, etc.; and (x) दान. a leather bag for the same purpose as the preceding.

> ¹ Bk. II, Fragment xxv. ² Bk. IV, **उपनिपातप्रतीकार**ः ।

In the city, every householder had to provide himself with the ten remedial instruments. During summer the kindling of fire was prohibited during the second and third quarters of the day. All men were enjoined, under the penalty of fines, to run to give help, in case fire broke out in any house. Thousands of vessels filled with water had to be kept in rows not only in the big roads but also at the crossings of roads and in front of royal buildings. The masters of the houses had to sleep at night in a place near the main doors of their premises, so that they might be easily accessible and come out of their houses to give help without delay. Thatched roofs made of straw and other materials that readily take fire, were not allowed within the city. Those who worked by fire, e.q. blacksmiths, had to live in a particular guarter of the city. Persons wilfully setting fire to a house were severely dealt with. If it was through negligence, only fines were imposed.¹

¹ अविप्रतीकारंच प्रीये मध्यमयोरक्तच तुर्भागयोः अवस्मागोध्य-दण्डः । बच्चिरधित्रथणं वा कुर्युः । पादः पद्यघटीनां कुश्वद्रोणी-नित्रेणीपर ग्रु ग्रूर्पाक्षुग्र-कच यहणीद तीनांच अपकरणे । त्वणकट-अकुद्रान्यपनयेत । अपिजीविन एकस्थानं वासयेषुः । स्वत्टक्तप्र-

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To propitiate Fire, offerings were made to him every day and prayers said.¹

A FEW OTHER WORKS OF PUBLIC UTILITY.

We shall now turn to a few miscellaneous works of public utility, which are not without some interest. These were :---

(i) Jail deliveries.—To celebrate the anniversaries of the king's birthday and in commemoration of the birth of a prince, the installation of an heir-apparent, or the conquest of a new country, prisoners were set at large. Generally, on full-moon days, such prisoners as were very young, old or diseased were let out. Sometimes the prisoners were set free in consideration of their uniformly good conduct in the jail.²

(ii) Advocacy of temperance.—Only a limited number of people was allowed to take part in

² Bk. II, नागरकप्रणिधिः ।

दारेषु ग्रन्डस्वासिनो वसेयुः । असंपातिनो रात्री रयासु कटत्र-जास्सन्हतं तिष्ठेयुः । चतुष्पथद्वारे राजप्ररिषद्देषु च । प्रदीप्त-मनसिधावतो ग्रन्डस्वासिनो दाद्रेपपणे दण्डः । षट्पणो विक्र-यिषः । प्रमादाद्दीप्तेषु चतुष्पद्या शत्पणो दण्डः प्रादीपिको श्मिना वध्वः ।---Bk. II, नागरकप्रणिधिः, p. 145.

¹ Bk. IV, **उपनिपातप्रतीकार**ः ।

liquor traffic, and a heavy fine was imposed on those who violated the rule. Liquor was sold only in small quantities not exceeding 1 prastha or 15 kancha in any case. Liquor shops were not allowed to be set up close to one another, and a Brâhman who took to drinking was very severely punished.1

(iii) Grant of jagirs, etc.-Brahmans performing sacrifices, spiritual guides, priests-all of them learned in the Vedas-were granted lands vielding sufficient produce and exempt from taxes. They were also given forests of soma essential to sacrifices.²

The wives and children of those officers who died while on duty received allowances. Infants and aged or diseased persons related to the deceased officers were shown favour. Under pecuniary stress, the officers were given forest produce, fields, cattle, etc., along with a small amount of money.3 Indigent widows and disabled women and girls were provided with work in the weaving depart-

¹ See सुराध्यच:--Bk. II, p. 119, and वाक्यकर्मानयोग:---Bk. IV, p. 220.

² Bk. II, भूमिच्छिद्रविधानम् । ³ Bk. V, भृत्यभरणीयम ।

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ment of the State. Those women and girls who did not come out of their houses in strict observance of the $Pard\hat{a}$ system but were compelled by poverty to work for subsistence, had uneir work brought within their reach daily by women servants of the weavinghouse.¹

(iv) Government seems to have kept a close watch that the claims of slaves, hirelings and dependents were not over-ridden. Elders of villages were entrusted with the duty of looking after the orphan minors in a village, and no person having wife and children was allowed to become an ascetic until he had made adequate provision for their maintenance. The State provided with maintenance the infirm and afflicted.²

> ¹ Bk. II, सूत्राध्यत्तः । ² Bk. II, जनपद्निवेगः ।

CHAPTER VII.

THE CENSUS.

It is interesting to know that there was some form of census current in India over two thousand years ago. Megasthenes hints at this in the following extract we make from his account:—

"The third body of superintendents consists of those who inquire when and how births and deaths occur, with the view not only of levying a tax but also in order that births and deaths among both high and low may not escape the cognizance of Government."¹

The testimony of Megasthenes is amply confirmed by the details of census and similar operations preserved in the Arthasâstra. The necessity to Government of an intimate knowledge of the places and people under it goes without saying and it is no wonder

¹ Megasthenes, Bk. III, Fragment xxxii.

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that in the effective administrative organization of Chanora Gupta there was found a place for census operations, the scope and aims of which were, however, necessarily different from those of similar operations in modern times.

The distinguishing feature of Chandra Gupta's census appears to be that it was not periodical, but a permanent institution-a department of the State run by permanent officials. The department was a large one, manned by several officers. The head of the department was called समाइता, i.e. collector-general, who combined in himself, besides those connected with the census, various other functions, such as collection of revenue, checking accounts, land survey, and the like. The area under his administration was in the first instance divided into four districts, and each district into a number of villages. Each district was placed under an officer (स्वानिक), and under him was appointed a number of subordinate village officers (1)14), whose work was supervised by their superiors, the district officers. The village officer was put m charge of five or ten villages, according to the directions of the

collector-general.¹ Besides these, inspectors (प्रदेश) were appointed for checking both the work and methods of the village and district officers. But this inspection was not enough. Over and above the inspectors, a special batch of officers was appointed by the collector-general to work as spies and "overseers" under various disguises on their own independent lines and supply information on their own account. The sphere of work of the spies was not identical with that of the village officers, for it included certain points of inquiry to which the village officers had to attend, and at the same time a few independent heads of inquiry, as will be explained below.

The functions of the village officers (excluding those in connection with the land survey) were these 2 :—To number the inhabit-

¹ समाहर्ता चतुर्धा जनपदं विभज्य ज्येष्ठ-सध्यम-कनिष्ठ-वि-भागेन यामाग्रं परिहारकमायुधीयं धान्यपद्धहिरण्यकुर्यविष्टिकर-प्रतिकरमिदमेतावदिति निवन्थयेन् । तत्प्रदिष्ट: पद्यग्रमी दश-यामी वा गोपखिन्तयेत् । एवं च जनपदचतुर्भागं स्थानिक: स्विन्तयेत् । गोपस्थानिक-स्थानेषु प्रदेषार: कार्य्यकरणं बलिप्रग्रहं च कुर्य्यु: ।---Bk. II, समाहनुप्रचनर:, pp. 141, 142.

तेषु चैनावचातुर्वर्णसेतावनः कर्षक-गोरचक-वैदेषकारकर्म-

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ants of all the four castes in each village; to count the cultivators, cowherds, merchants, artisans, slaves, the young and old men and women of each house, and ascertain their character ($\neg (\neg (\neg))$, occupation ($\neg (\neg)$), income ($\neg (\neg (\neg))$) and expenditure ($\neg (\neg)$), income ($\neg (\neg (\neg))$) and expenditure ($\neg (\neg)$); to number the biped and quadruped animals in each house, the taxpaying and non-taxpaying houses, and determine the amounts of gold, free labour, tolls and fines collected from each house.

The functions of the spies, besides their duties in connexion with land survey and revenue collection, were²:—To number the total of inhabitants in each village, to number the houses and families in it, to ascertain the caste and profession of each family;

करदासाचैतावच द्विपदचतुष्पदसिदं चेष चिरण्य-विष्टि-ग्रुल्त-दण्डस्नुमनिष्ठतीति ।

ग्टडाणां च करदाकरदसङ्ख्यानेन ।

-Bk. II, समाइर्तृप्रचार:, p. 142.

ो कुछानां च स्तीपुरुषाणां बालटढकर्म्मचरिँचाजीवयय परि-माणं विद्यात् ।--Ibid.

ै समादर्मुप्रदिष्टाच ग्टहपतिकयञ्चना थेषु प्रामेषु प्रणिहिता-सेषां यामार्था चेचग्टहकुलाग्रं विद्युः । मानसञ्चाताभ्यां चेचार्षि, भोगपरिहाराभ्यां ग्टहार्षि वर्ष-कर्माभ्यां कुलाणि च । तेषां जङ्गाग्रं चायवयी च विद्युः ।---Ibid. to determine which house was tax-free; to determine the occupiers of houses; to ascertain the income and expenditure of each family; to count the number of domesticated animals (जङाप) of each house. It will be seen that these points of inquiry are in common with those of the village officers; over and above these, there were a few independent heads of inquiry,¹ viz. to find out the causes of emigration and immigration, to ascertain the number of men arriving and departing, and to watch the movements of men and women of suspicious character. It should be remarked that they had to perform the above duties under the guise of householders (स्टर्पनिकवञ्चनाः). Disguised as ascetics (नापगवज्ञना:), they watched the movement of cultivators, cowherds, merchants, and superintendents of Government departments.² Sometimes, also, under the guise of thieves (witrawa), the spies, with their followers, frequented places of pilgrimage,

प्रस्थितागनानां च प्रवासावासकारणसनर्थानां च स्तीपुरुषायां चारप्रचारं च विद्य: I-Ibid.

² एवं समाहर्तृप्रदिष्टासापसवञ्चनाः कर्षकगोरचकवैदेहकानाम-ध्यचार्या च शीचाशीचं विद्युः ।---समहत्वप्रचारः, p. 148.

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bathing-places, deserted tracts, mountains, ancient ruins, etc.,¹ to detect thieves, enemies and wicked persons.

The census of cities and the metropolis was the work of departments under officers called $\pi i \pi c \pi$.² Every city had its $\pi i \pi c \pi$, and was, like the province, divided into four quarters, each administered by an officer known as $\pi i f \pi \pi$. Under him worked the minor officers called Gopas ($\pi i \pi$), who had to keep the account of ten, twenty, or forty households as the case might be. They had not only to ascertain the caste, *gotra*, name and occupation of both men and women of those households, but also to ascertain their income and expenditure. To minimize the difficulty of keeping account of travellers and other non-residents,³ managers of charitable institutions were required to send

' पुराण - चोरवञ्चना सान्तेवासिन सैत्य-च तुष्पष - ग्रून्यापदोद -पान-नदी-निपान तीर्थायतनात्रमारण्य-ग्रेखवनगन्दनेषु सेनामिच-प्रवीरपुरुषार्था च प्रवेग्रनस्यानगमनप्रयोजनान्युपस्तमेरन्—Ibid.

² समाइर्तृवद्वागरको नगरं चिन्तयेत्। दशकुर्झी गोपो, विंश-तिकुर्खो चलारिंशत् कुर्खी वा। स तस्यां स्तीपुरुषाणां जाति-गोवनामकर्मभिः अङ्घाधनायवयौ च विद्यात्। एवं दुर्गचतुर्भागं स्थानिकस्थिनायेत्।—Bk. II, नागरैकप्रणिधिः, pp. 148, 144.

⁸ धर्मावस्थिन: पाषण्डि-पथिकानावेद्युवास्रयेषु: ।- Ibid., p. 144.

information to the census offices in case any such person arrived to reside therein.¹ Masters of households were also similarly required to send reports of the arrival and departure of strangers. If they failed to make such reports they were fined. Merchants, artisans, physicians, etc., had also, under the city rules, to make reports to the officer in charge of the capital regarding people violating the laws of commerce, sanitation, etc., for better management of the city affairs; but as these fall outside the scope of the census, we need not take note of them.

It has been already pointed out that the work of land survey was entrusted to those very officers who conducted the census operations. The duties of the officers in regard to land survey were mainly those of setting and fixing the boundaries of villages, classification and numbering of plots of land as cultivated and uncultivated, plain and upland, wet and dry, and so forth. An account was also kept of gardens and forests, temples and places of

¹ प्रस्थितागती च निवेदयेत्। खन्यथा राजदोषं भजेत्। जेम-रात्रिषु चिपणं दद्यात्।—[bid.

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pilgrimage, feeding-houses, irrigation works, roads and crematories, storages for travellers, and pastures.¹ The supplementary body of officers or "overseers" had also to examine the accounts of this department regarding the fields, houses and families of such villages.

In conclusion, a few words should be said in regard to the scope and aims of the census operations in ancient India. The necessity of them appears to have rested on political as well as economic grounds. Politically, they were of great advantage to a Government like Chandra Gupta's, surrounded as he was by quite a number of independent hostile kingdoms. The census system kept him and his officers fully informed of those facts that were necessary for the security of the empire. We find it laid down as one of the duties of the census officials that they should watch the movements of suspicious people, of foreign spies, the emigration and immigration of men

¹ सीमावरोधेन ग्रामायं क्षष्टाछट-स्थलकेदारारामषण्ड-वाट-वन-वासु-चैत्यदेवग्टइ-सेतुभन्ध्राण्लासच-प्रपापुण्खस्थानविवीतपथि-सङ्ख्यानेन चेचायं; तेन सीझां चेचाणां च मर्थादारण्य-पथि-प्रमाण सम्प्रदान विक्रयानुग्रइपरिहारनिबन्धान् कारयेत्। ----सुमाहर्तृप्रचार:, p. 142. and women of doubtful characters, and ascertain the causes thereof. These are facts of which an accurate knowledge is indispensable for the security of the State.

The census helped them politically in another way. We see in a passage, already quoted in another connexion,¹ that villages were classified not only as of first, middle, and lowest rank, but also as those that were free from taxation (परिषारक), those that supplied soldiers (पायुषीय), those that paid taxes in grains, cattle, gold, forest produce (क्रुप), etc., and those that supplied free labour (fafe); so that the census was of help to Government by supplying information as to which villages formed the most convenient recruiting grounds for the imperial army.

Economically, the importance of the classification of villages and of the information as to the occupations of the people, their income and expenditure, etc., goes without saying, forming as it did a valuable aid to taxation and a most

¹ समार्च्ता च्येष्ठ-मध्यन-कनिष्ठ-विभागेन यामायं परिचारक-मायुधीयं धान्यपग्रुच्डिरप्यकुप्यविष्टिकरप्रतिकरमिदमेतावद्ति निवअयेत्।—(समादर्त्युप्रचारः)।

CH. VII.] ANCIFNT HINDU POLITY 115 reliable index to the material condition of the people.¹

¹ The Encyclopædia Britannica, vol. v, p. 662 (New Edition), gives the following account of census operations of a few other countries in ancient times :—

"The fighting strength of the Children of Israel at the Exodus was ascertained by a count of all males of twenty years old and upwards, made by enumerators appointed for each clan. The Levites, who were exempted from military duties, were separately enumerated from the age of thirty upwards, and a similar process was ordained subsequently by Solomon, in order to distribute among them the functions assigned to the priestly body in connection with the Temple. The census unwillingly carried out by Joab at the behest of David related exclusively to the fighting men of the community, and the dire consequences ascribed to it were quoted in reprobation of such inquiries as late as the middle of the eighteenth century. It appears, too, that a register of the population of each clan was kept during the Babylonian Captivity, and its totals were published on their return to Jerusalem. In the Persian Empire there was apparently some method in force by which the resources of each province were ascertained for the purpose of fixing the tribute. In China, moreover, an enumeration of somewhat the same nature was an ancient institution in connection with the provincial revenues and military liabilities. In Egypt, Amasis had the occupation of each individual annually registered, nominally to aid the official supervision of morals by discouraging disreputable means of subsistence; and this ordinance, according to Herodotus, was introduced by Solon into the Athenian scheme of administration, where it developed later into an electoral record.

"It was in Rome, however, that the system from which the name of the inquiry is derived was first established upon a regular footing. The original census was ascribed to Servius Tullius, and in the constitution which goes by his name it was decreed that every fifth year the population should be enumerated along with the property of each family—land, livestock, slaves and freedmen. The main object was to ensure accurate division of the people into the six main classes and their respective centuries, which was based upon considerations of combined numbers and wealth. With the increase of the city the operation grew in importance, and was followed by an official *lustrum*, or purification sacrifice, offered on behalf of the people by the censors or functionaries in charge of the classification. Hence the name of *lustrum* came to denote the intercensal term, or a period of five years. The word *census*, too, came to mean the property qualification of the class, as well as the process of registering the resources of the individual. Later it was used in the sense of the imposition itself, in which it has survived in the contracted form of *cess*."



CHAPTER VIII.

THE COURTS OF JUSTICE.

IT goes without saying that the welfare of the people is determined to a considerable extent by the nature of the law of the land and the efficient administration of justice. Laws are unseen agencies as important for popular wellbeing as the visible agents of government. The object of this and the following chapters will be to consider in detail some of the laws of Chandra Gupta's Government, the way they were administered, and the contribution they made to the material welfare of the country.

There were two classes of law courts in the country, the घर्मासीय courts and the जण्ड-कसोधन¹ courts—each differently constituted. There was also a difference in respect of the

¹ Literally, the courts for the removal of thorns (disturbances).

nature of the cases that came under their cognizance.

First, as to composition,¹ each धर्मासीय court² was made up of three persons well grounded in the Sastras (*i.e.* धर्मासा:) or three ministers (चमात्या:) who sat together for hearing cases.

In each कण्डकशोधन court, three चनात्य's or three घदेष्टार's sat to decide cases.

Next, as to the jurisdiction of the courts, a unimit court generally decided such cases as arose from the personal grievances of one or a few individuals against another or a few other individuals, and the punishments were only in fines, these fines being not very heavy. The cases that came within the jurisdiction of a accarian court generally related either to matters that affected the Government, the king himself, the public at large and large bodies of men, or to such other heinous offences as murder. Though small fines were inflicted by this court for offences that were not so grave, yet the fines for the graver offences ranged up to a very high limit.

² The text seems to be faulty : " **a**t" seems to be left out.

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This distinguishes it from a धर्माखोध court. Another distinction consisted in the fact that it lay in the power of a जण्डकसोधन court to inflict capital punishment, with or without torture according to the gravity of the offences.

Below are given two lists of the kinds of cases that came under the cognizance of the two classes of law courts :---

I. The धर्मासीय court tried cases bearing on the following questions :---

(i) Validity of contracts-व्यवदार खापना. (ii) Violation of contracts of service--समयसानपानमं. (iii) Relation between master and servant, employer and labourer-wirefuant;, (iv) Slavery-दासकल्प:. (v) Recovery of भतकाधिकारः. debts-च्छणादानम. (vi) Deposits-चौपनिधिकम. (vii) Rescission of sale-विक्रीत क्रीतान् ग्रथ:. (viii) Resumption of gifts-दत्तस्यानपावर्म. (ix) Robbery and violence--साइसम्. (x) Assault-इण्डपार्ण्यम. (xi) Defamation-वाक्यपार्ण्यम. (xii) Gambling--यूतसमाइयम. (xiii) Sales of property by another than owner-waififamu:. (xiv) Rights of ownership-ससामिसम्बन्ध:. (xv) Boundary disputes-सीमाविवाद:, मर्था-दास्यापनम. (xvi) Construction of buildings-वास्तकम. (xvii) Sale of house property-arefana:. (xviii) Damage to agriculture, pasture and public roads-वियोतचेत्रपय-हिंसा. (xix) Miscellaneous hindrances- वाधावाधिवस. (xx) Duties of man and wife-विवाद्यसंयुत्तान्, विवाद्यमाः, स्तीधनतस्पः, etc. (xxi) Partnerships--- मम्रागम्. (xxii) Inheritance and succession -दायविभाग:, दायक्रम:, etc. (xxiii) Miscellaneous offences--प्रकीर्णकानि. (xxiv) Rules of procedure-विवादपदनिवन्ध:

II. The कण्डकशोधन court tried cases relating to the following :---

(i) Protection of artisans—कारकरचणम्. (ii) Protection of merchants—वदेइरचणम्. (iii) Measures against national calamities — जपनिपातप्रतीकार:. (iv) Suppression of the wicked — सूडाजीविनां रचा. (v) Detection of criminals by ascetic spies—जिद्दयञ्चनेमानवप्रकाण्डनम्. (vi) Arresting robbers on suspicion or in the act—एङारपक्रांगिपद:. (vii) Postmortem examination—जाग्रुम तकपरीचा. (viii) Cross-examination—वाक्सकमानुयोग:. (ix) Discipline in Government departments—जवाधिकरणरचणम्. (x) Fines in lieu of mutilation of limbs—एकाङ्ग्यानिष्य:. (xi) Capital punishment with or without torture—ग्रुइच्चिद्यदण्डक्य:. (xii) Improper social intercourse—कयाप्रकर्म. (xiii) Punishments for miscellaneous offences—चतिचारदण्ड:.

It should be noted¹ that over and above these courts, the head-man ($\pi i \pi \pi$) and the elders of a village ($\pi i \pi \pi \pi \pi$) played an important part in the settlement of disputes among the villagers, and the former was vested with the power of summarily punishing certain offences. It appears from a passage that he could "deport" out of the village under his charge a thief or an adulterer if such a step became necessary.

¹ See वासुविक्रय:, p. 169, Bk. III, and विवीतचेचपथडिंसा, p. 171, Bk. III.

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The king with his ministers and learned Brâhmans formed the highest court of appeal.¹

Now, as to the seats of the above courts: they held their sittings in every जंगचग, *i.e.* a town forming the headquarters of villages; in every दोषगुष, *i.e.* a town which was the headquarters of 400 villages; in every चानोय, *i.e.* a town being the headquarters of 800 villages; and in every जनपद्धनि, *i.e.* a place centrally situated between any two provinces of the empire. It will thus be seen that the metropolis must have had courts of the above two classes besides the royal law court.²

¹ Bk. I, राजप्रिषिः ।

² व्यवहारसापना and कारकरचणम् |-Bk. III; see also Bk. II, जनपद्निवेग्र: ।

CHAPTER IX.

LEGAL PROCEDURE.

In the previous chapter the constitution of the law courts has been dealt with; in the present, the laws themselves will be considered.

The four basal factors¹ that were taken into account in the administration of justice were: (1) Sacred laws or laws contained in the

- 1 धर्माख व्यवद्वारख चरित्रं राजशासनम्
 - (a) विवादार्थच तुष्पादः पर्स्विमः पूर्व्ववाधकः ।
 भाव सत्यस्थितो धर्म्पों व्यवच्चारसु साचिषु
 (b) चरिचं संग्रेडे पुंसं राज्ञामाज्ञा तु शासनम् ॥
 ---Bk. III, विवादपदनिवन्थः, p. 150.

That **यवदार** means here a contractual relation or a contract is indicated by passage (b). It says that **u**til is based on truth, **यवदार** on evidence, and **राजाराधन** on the king's order, while custom is determined by large bodies of people. In fact, witnesses were essential to tessify to contracts, which were mostly verbal in those days, and this favours the adoption of the above meaning. Besides, the word has been used in the above sense in Manu—VIII, 165, 164, 167; *vide* also the *Indian Wisdom* by Monier Williams, p. 268, where the word has been taken to mean contract.

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Dharma Sastras (घर्म), (2) contractual relations created by the parties (यवचार), (3) customary laws (चरित्र), and (4) statutory or king-made laws (राजग्रामन).

In case of conflict between (1) and (2), or between (3) and (4), the former prevailed over the latter ($\mathbf{uf}\mathbf{u}\mathbf{n}: \mathbf{u}\mathbf{u}\mathbf{a}\mathbf{u}\mathbf{n}\mathbf{u}\mathbf{n}$); so that a contract could not transcend sacred law or a statute custom. Passages quoted below show, further, that a statute should also be in consonance with sacred law ($\mathbf{u}\mathbf{u}$), contract ($\mathbf{u}\mathbf{u}\mathbf{u}\mathbf{n}\mathbf{t}$) and equity ($\mathbf{u}\mathbf{u}\mathbf{u}$), and that in case of conflict between custom ($\mathbf{u}\mathbf{u}\mathbf{u}$) and contract ($\mathbf{u}\mathbf{u}\mathbf{u}\mathbf{t}\mathbf{t}\mathbf{t}\mathbf{u}$) the injunctions of sacred law should be followed. It is also stated that in the event of conflict between statute and equity the statute became inoperative and nullified.¹

When a case came up for decision, the pre-

¹ खनुशासदि धर्मोण ववहारेण संखया न्यायेन च चतुर्थेन चतुरन्तां महीं जयेत् ॥ मंखया धर्माशाकेण शास्तं वा ववहारिकम् यस्मिन्नचे विरुधित धर्मीणार्थं विनिच्चयेत् ॥ शास्त्रं वित्रतिपर्यंत धर्म्मन्यायेन केनचित् न्यायस्तच प्रमाणं स्थानच पाठो हि मध्यति ॥ —*Ibid.*, Bk. III, p. 150.

(Here चनुशासन and शास्तं refer to राजशासनस, i.e. kingmade law.)

liminary step taken was the registration of the following particulars regarding the suit:---

(i) The exact date (showing the year, season, month, fortnight and day); (ii) the nature of the offence, and (iii) the place of its occurrence; (iv) the amount of debt incurred, if any; (v) the country, village, caste, gotra, name and occupation of the plaintiff (बादो) and the defendant (अत्विवादो), both of whom must be competent to sue; and (vi) the statements of the parties, which had to be thoroughly scrutinized by the court.

Each of the parties had to be on guard against the following kinds of the offence termed परोन्नदोष (paroktadosha):---

(1) Deviating from the question at issue and taking to another question; (2) contradicting the previous statement; (3) insisting on the need of consulting the opinion of a third person though his opinion be not worthy of such consideration; (4) breaking off while answering a question though ordered by the court to continue; (5) introducing questions other than those already specified; (6) withdrawing the statement already made; (7) not accepting what one s own witnesses have said;

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and (8) holding secret conversation with the witnesses when it was not allowed.¹

Besides these,² there were other sorts of परोन्नदोष. The plaintiff had to make his rejoinders the very day the defendant had answered, for it was presumed that the plaintiff was ready to go on with the case; otherwise he was guilty of uring. But if the defendant was not ready for the case, he was allowed three or seven nights to prepare his defence. If he failed to make his defence within that time, he was punished with a fine ranging from three to twelve panas. If he could not answer even after three fortnights, he was guilty of परोन्न, and the plaintiff could recover out of the defendant's property the amount sued for, unless he (plaintiff) agreed to accept in its stead some good service from the defendant. The same punishment was inflicted on the defendant who utterly failed in his defence. If the plaintiff failed to prove his case within the aforesaid time, he committed a परोन्न. If he failed to substantiate his charge against a deceased person, he was made to

¹ Arthasâstra, p. 149.

² Ibid., pp. 149 and 150.

perform some of his funeral rites. If ' he was not a Brâhman he might be ordered to perform the ceremonial रचोन्नरचितम्. The fine for परोक्त generally was पचवत्र. Making an assertion without any evidence to support it was another परोक्तदोप, the fine for which was दसवत्र.²

In cases other than strife, violent and direct seizure of property and disputes among merchants, the defendant could not file a countercase against the plaintiff. Two suits against a defendant for the same offence were not allowed.³

We now proceed to consider the rules regarding witnesses. At the outset it is to be noticed that agents were attached to the law courts for secretly ascertaining if possible the

¹ This passage seems to be a little faulty, and the meaning of the next passage, "आधिं वा सकानं प्रवेश्येन्," is not clear.

² Vijñânesvar, in his Commentary on Jájñavalkya II, v. 174, explains **una** as a fine equal to the fifth part of anything lost or stolen.

If in the light of this explanation, we take the meanings of पद्यवन्त्र and द्शवन्त्र to be the fifth and tenth part of the amount sued for, we meet with difficulty in applying them to line 6, p. 176, Bk. III, फरणादानम, and line 6, p. 184, Bk. III, दासकपर: |

 अभियुक्तो ल प्रत्यभियुक्तति अन्यव कल्राइ-साइस-सार्थ-सम-वायेश्य:। न चाभियुक्तेरभियोगोर्रसि ।---p. 149.

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real facts of a law-suit, and for reporting them to the judges.¹ How far the information they furnished would be followed in a particular case depended, of course, upon the discretion of the judges They had to use their discretion with great caution, especially in cases like that instanced in the passage quoted below,² where the depositions of witnesses were inconsistent and contradictory, and consequently in conflict with the statement of the plaintiff, and where there was a divergence of the report of the "informants" from both the statement of the plaintiff and the evidence.

The principal check upon the indiscretions of the judges was the punishment they incurred for their laches and iniquity. The report of the informants had to be utilized therefore with great care, and, with its chances of abuse minimized, it was meant to help the judges sometimes by creating suspicions in their minds which prompted them to sift the

> ¹ पूर्वोत्तरार्थयाधाते साचिवक्तयकारणे चारइसाच निष्पादे प्रदेख्यः पराजयः । —Bk. III, विवाद्पद्निवन्धः, p. 151.

evidence more cautiously, and sometimes by corroborating the conclusion pointed to by the statements of the witnesses.

We find from the Arthasastra that a suit was not dismissed on the ground that there were no witnesses forthcoming to testify to the question at issue. For instance, in disputes regarding the non-payment of the wages of a labourer, he could sue his employer even if he could procure no evidence to support his suit.¹ Such a procedure would appear strange, unless we bear in mind that over and above crossexamination of the parties and overt inquiry that could be availed of in such a case, there was another resource to fall back upon, viz. the secret agency for collecting information. Several such instances will occur to us as we proceed.

Let us now turn to other rules. In a lawsuit three witnesses, either approved by both the parties (भन्मता:), trustworthy (प्रात्ययिका:), or pure (ग्राज्यय:),² served the purpose best. In a

¹ Bk. III, द्रास करप:, p. 184.

² प्रात्ययिकाण् ग्राचयोऽनुसता था चयोऽवरार्थ्याः । पत्तानुसती वा द्वौ ऋणं प्रति न ल्वेवेकः ॥—Bk. III, p. 175. ऋणादानस्, साच्यधिकार: । In view of the fact that even a suit with no

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suit for debt, however, two witnesses approved by the parties might be sufficient, but never one.

The fact of relationship with the plaintiff or defendant affected the competence of a person as witness. The following persons were not eligible as witnesses, viz., (1) wife's brother (खाल), (2) helpmate (पहाय), (3) prisoner (भायक), (4) creditor (धनिक), (5) debtor (धारणिक), (6) enemy (वैरी), (7) dependent (यज्ञ), (8) convict (षगदणः). In addition to these a few other persons could not appear as witnesses except in cases which affected their own people: (a) the king (राजा), (b) a person learned in the Vedas (जोजिय), (c) the village poor (यासमन), (d) lepers, etc. (कुडि, अपी), (e) an outcast (पनिस), (f) a Chandâla (जजाज), (g) a person of mean avocation (कुल्मिनकर्मा), (h) a dogmatist (अरंगदी), (i) a female (with), and (j) a Government servant

evidence to support it could receive hearing, it seems inconsistent to translate "चयोऽवरार्थ्या:" by "at least three witnesses." So it would perhaps be more reasonable to take " चवरार्थ्या:" in the sense of "serving the purpose best" (नासि वर: यसात् = जवर:).

प्रात्ययिका: and ग्राच्य:—It may be that they refer to two distinct classes of witnesses designated by the two names, the most marked attributes of a witness determining the class under which he falls.

(राजपुराष).¹ In cases of assault, etc. (पाराष), theft (खेय) and rape (जंपहरू), persons other than the enemy, the wife's brother and the helpmate could bear witness. Any man or woman having secret knowledge of an underhand transaction could be a witness in regard thereto. The king and the ascetics (जापछ) were exempted from this rule.

In case of a dispute between father and son, preceptor and pupil, or master and servant, the words of the superiors were given greater credence.

Witnesses had to take oaths to divulge the truth before Bråhmans, vessels of water and fire. There were set formulas, varying according to the castes of the witnesses, by which they were urged to speak the truth. A Brâhman witness was simply told "Speak thou the truth." The formula for a Kshatriya and a Vaisya was: "Thou wilt not have fulfilment of thy ambition and wilt have to go a-begging to thy enemies with a skull in hand for a begging-bowl (if thou speak

¹ In this passage it is not clear who are indicated by the words "पूर्व्य च चवराया:," p. 175, Bk. III, च्छणादानम् (साच्याधिकार:) ।

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falsehood)." A \dot{S} ûdra was exhorted thus: "All thy religious merit will go to thy king and all the sins of the king will come to thee (if thou utter a lie), and moreover, thou wilt be punished. Inquiry will be made as to what has been seen or heard."¹

If the witnesses made a concert among themselves and kept back the truth for more than a week, they were fined twelve panas. If they continued obstinate for more than three fortnights they were punished with the payment of the amount sued for.

When the witnesses gave divergent evidence, the judgment was passed upon the basis of the statements of the majority of pure (ग्रजवः) and approved (जनुजगः) men among them. Or the judgment could follow a via media, if any such were suggested by the diverse statements of the witnesses. Failing these, the Government assumed possession of the article, if

any, that formed the subject matter of the dispute.

If an amount were sued for and the witnesses deposed that only a part of the amount belonged to the plaintiff, then the rest of the amount had to be deposited with the Government. If, however, the witnesses testified to an amount greater in value than what was actually sued for, the excess went to the Government coffers.

Those witnesses who were easily accessible were called by the parties themselves; those who were far away or who would not come to court except under compulsion were served with summons (आभिषाक्ष)

The defeated party had to bear the fees paid to the witnesses. They received a food allowance $(\Im \land \Im \Im \neg \Im$ in which were taken into account eight items of food. What these items were is not known. Besides this allowance, they were given the necessary expenses for and during their journey

A peculiarity of Hindu law courts in ancient times was that the judges had to pay a penalty for their iniquity. They were strictly enjoined to decide cases free from all circum-

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vention, steady in all circumstances, impartially and diligently, thus winning the love and confidence of the people; but if they were guilty of any laches, partiality or any such misconduct unworthy of a judge, they could not escape with impunity. This feature is also noticed in Chandra Gupta's law courts. If a judge threatened, rebuked, silenced or drove out a party to a suit, he was liable to the lowest amercement;¹ and for abusing a party, to a fine of double the amount. If he put irrelevant questions to a party, wilfully omitted to ask a pertinent question, did not note down what he heard in reply to his queries, tutored or provided a party with his previous statements, he was fined the middlemost amercement. If he inquired into unnecessary circumstances, caused delay by such inquiry, postponed work on flimsy pretexts, tired the parties out of court by his dilatoriness, misled them, helped the witnesses with clues, or resumed the work already disposed of, he was punished with the highest amercement. If he committed any of the offences a second

¹ For the three kinds of amercement, see Bk. III, साइसम्, p. 192.

eime, he was fined double the amount and dismissed.

For an unjust fine, a $\mathbf{v} \mathbf{u} \mathbf{k} \mathbf{u}$ or $\mathbf{v} \mathbf{k} \mathbf{c} \mathbf{u}$ was fined double the amount or eight times the excess of the amount over the prescribed limit, according to the nature of the offence. If a corporeal punishment were unjustly inflicted, he was condemned either to the same punishment or to the payment of twice the amount fixed in lieu of that kind of punishment. The judicial officer who brought to naught a good case or helped to concoct a false one was fined eight times its value.

The scribe who took down the statements of the parties was liable to the following punishments for negligence or misconduct. If he wilfully omitted to note what was said, noted down what was not said, left out what was badly said, or rendered diverse or ambiguous what was well said, he was liable to the first amercement or to any other punishment proportional to his guilt.

Care was taken to prevent the escape of a culprit from the law court (भर्मामीय), the $\frac{h^{3/3}}{4}$ (भारक), or the prison (बन्धनागार), as

well as to prevent the abuse of the jailor's authority.¹

It is not clear who tried the judges for their misconduct. It seems most likely, and it is also consonant with the ancient Hindu lawcodes, that the king or his associate judges tried them.²

Certain latitude seems to have been given to the superintendents of the several State departments to summarily dispose of certain kinds of offences committed by their subordinates. How far their power extended in this direction is not clearly defined, but it seems to have been confined to the offences done by the subordinates in their course of business.

¹ See Bk. IV, सर्व्याधिकरणरचण, pp. 222, 223.

^z See J. R. A. S., vol. ii, p. 193-" On Hindu Courts of Justice."

СНАРТЕВ Х.

THE LAW OF CONTRACT.

§ 1.-GENERAL.

To understand the full significance of contract (यवसार) as it obtained over two thousand years ago, it is essential that we should free our minds from the modern associations of the institution.

We shall begin with a general statement of the requisites of a valid contract, and then follow out each of those requisites in detail.

A contract¹ was of course a two-sided

- ¹ (X) तस्नात् साचिनदच्छन्नं कुर्य्यात् सम्यग्विभाषितम् । स्ते परे वा उनने कार्य्य देशकाजाग्रवर्णत: ॥ —Bk. III, ज्यौपनिधिकम, p. 181.
 - (Y) से से तु को देशे काले च सकरणकता मम्पूर्णचाराश् ग्राइदेशा दृष्टरूपलचण-प्रमाणगुणाम् सर्व व्यवचारा सिरधेयुः । (पश्चिमं लेषां करणमादेश्राधिवर्जं त्रद्वेयुः)

In (Y), waave may be taken to refer to the free exercise of

act, and the parties thereto could be both individuals as well as groups; e.g. a body of persons engaged in a common concern (षभूष षमुत्यान) was entitled to be a party to a contract.

Secondly, a contract had to conform to the following restrictions, viz. (a) that the agreement between the parties should be

one's will, though a technical meaning (=document) may be attached to करण (vide Manu, VIII, 51, 52, 154).

I quote here Manu, VIII, 51 :---

ऋर्थेऽपययमानन्तु करणेन विभावितम् । दापयेद्वनिकस्त्रार्थं दण्डलेग्रम्व ग्रक्तितः ॥

But whichever meaning is taken, the reference to the un fettered exercise of the will of the parties is apparent in both the cases. $\mathbf{a} \subset \mathbf{u}$ in the second sentence in (Y) seems to bear the meaning of "document." **U**ar refers to the object or the **U**ar of the contract, and **U** to the circumstances under which a contract is made. This meaning of **U** (circumstances as opposed to the time and place of a contract) is found in Manu, VIII, 45--

सत्यमर्थं च सम्पश्चेदात्मानमथ साचिषः । देशं रूपं च कालं च व्यवहारविधी खितः ॥

प्रसाण = authority. It seems to refer to capacity of the parties, witnesses, etc. सम्पूर्णचार refers to all the technicalities that are to be complied with. ग्राइदेश, however, seems to be a needless repetition of what is implied by देशे that goes before.

clearly expressed (सम्यग्तिभाषित), (b) that it should not be made in secret (चष्ट्रज्ञ), and (c) that it should be in the presence of witnesses (याचिमत).

Thirdly, it should comply with certain condition's as to time (काज), place (देश) and यम (*i.e.* caste, class, etc.).

Fourthly, the object $(\overline{\mathbf{v}}\overline{\mathbf{v}}\overline{\mathbf{v}})$ for which the contract was made and the circumstances $(\overline{\mathbf{v}}\overline{\mathbf{v}})$ attending it must be such as not to offend against law in any way; *e.g.* there must be no undue influence, etc. $(\overline{\mathbf{v}}\overline{\mathbf{v}}\overline{\mathbf{v}}\overline{\mathbf{v}})$.

Fifthly, the consideration (चेनन) must not be illegal and improper; the parties, witnesses and agents must be competent (प्रमाचगुषगुज्ञ). In short, the contract must conform to all the technicalities of law, *i.e.* it must be चम्पुर्णचार [see passages (x) and (y), f.n.].

The first requirements, as I have already stated, are that the agreement of the two parties should be expressed properly and that there must be no secrecy about it. Witnesses have to be called when a contract is formed. It appears that instruments $(\pi \cdot \pi)$ are used in contracts, and when the terms of a contract are entered on an instrument, the witnesses

can be dispensed with.¹ We find its parallel in some of the Sanhitâs. But witnesses were a necessity in oral contracts.² We find, however, an exception to this general rule. A suit was not dismissed on the ground that no witnesses were forthcoming to testny to a point at issue. In a dispute, for instance, regarding the non-payment of the wages of a labourer, the employer could be sued even if

¹ An analogy to this rule is found in Colebrooke's Digest, vol. i, p. 16, third edition, where the contract of loan is dealt with :—

"Brihaspati, quoted by Bhavadeva, Vâchaspati and Chandesvar: A prudent lender should always deliver the thing, but, on receiving a pledge of adequate value either to be used by him or merely kept in his hands; or with a sufficient surety and either with a written agreement or before credible witnesses."

Yâjñavalkya, II, 91.—" But every document which is in the handwriting of the party himself is considered as sufficient evidence even without witnesses, unless obtained by force or fraud." For the passage of Manu on this point, see *supra*. For references to documents in contracts, see the passage (Y) quoted above; see also the last sentence, p. 176, **परणादानम**, which runs thus: वाचिग्रत्यादमियोज्ञ्रवा दु:युतं दुर्खिखितं प्रेताभिनिवेग्नं वा समीच्य साचित्रत्ययमेव स्थात् ॥

² It has been pointed out, while dealing with legal procedure, that three witnesses either approved by both parties (भनुमता:), trustworthy (प्रात्यायिका:), or pure (ग्रामय:) served the purpose best. In a suit for debt, however, two witnesses approved by the parties might be sufficient, but never one. For a parallel rule as to the number of witnesses, see Yâjñ., II, 69, 70; Manu, VIII, 60, 77. the former could adduce no witnesses.¹ Other instances of this exception will be furnished by the class of contracts called निरोचिन, to which we shall have occasion to turn presently. The presence of witnesses was repugnant to the object of a निरोद्ति contract; it was entered into in secret. A document may sometimes be used in such a case in lieu of witnesses, but sometimes there may be neither a document nor any witnesses.² Under such circumstances a dispute was decided by examination of the parties themselves, by a reference to any custom that might govern the transaction, by taking the opinion of experts (कुम्बा:), by utilizing other resources that the court commanded, e.g. the information given by the "agents" attached to the law courts, and by looking to some form essential to the transaction, e.g. the seal in the case of a sealed deposit. So we see that, as a general rule,

¹ दासकरूपः, कर्माकरकरूपः ॥ Bk. III, p. 184.

² Manu, VIII, 109 and 110 (S. B. E.)—"If two (parties) dispute about matters for which no witnesses are available, and the (judge) is unable to really ascertain the truth, he may cause it to be discovered even by an oath."

"Both by the great sages and the gods oaths have been taken for the purpose of (deciding doubtful) matters; and Basishtha even swore an oath before King (Sudasa), the son of Pijavana."

openness and publicity were required for the formation of a contract, which had to be entered into in the presence of witnesses. The absence of witnesses could be made up for by an instrument or otherwise.¹

Let us now turn to the restrictions as to time and place with which a contract had to comply. As a rule, the following contracts were void, viz. those that were (i) नजत्वन, *i.e.* formed during night; (ii) चनरजारकन,² entered into in the interior apartment of a house; (iii) चरच्चत, made in a forest; and (iv) जपकरकन, formed in any other secret place.³ The object

¹ In this connection it should be noted that a person who overheard or saw a thing by stealth could be taken as a competent witness—र इस यवद्वारे खेका स्त्री पुरुष अपत्रोता अपद्रष्टा वा साची स्थान राजनापसवर्ज ॥ p. 176—साद्यधिकार:. Other rules as to witnesses, that have been pointed out in connexion with legal procedure in general, apply also to contracts under proper circumstances.

² Manu takes note of the interior apartments of a house (चनावेग्रा) and of forests (चरण्): Manu, VIII, 69. Kauțilya also particularly mentions them. Yâjñavalkya mentions both नन्न and चनारगार contracts in Bk. II, 32.

^३ तिरोच्चितान्नरगार-नक्तारखोपश्चपकर-क्वतांच व्यवच्चारान् प्रतिषेधयेयु: । कर्न्तुः कारयितुच पूर्व्वस्साचसदख्डः । त्रोट्टणामे-कैकं प्रत्यर्धदख्डाः । त्रद्वेयानां तु•द्रव्यव्यपनयः ।

Exceptions :---

(a) परोचेणाधिकर्णग्रहणसवन्नविकरा वा तिरोडितासिस्धेयु:॥

of making these contracts void is, as already pointed out, that the law wanted to discourage clandestine contracts as far as possible. However, to remove possible hardship to particular classes of persons who might suffer by these rules, there were exceptions to the four rules. I shall speak of them here in the order of the above rules [vide (c), (b), (d), and $\{f\}$]:—

(i) Though all जन्नजन contracts are void, yet those that have some connexion with or are made to ward off violence, attack and affray, those that are formed for doing anything connected with the celebration of marriage, as well as those made under orders of Government, were valid. The contracts made by the पूर्वाराजयज्ञारिय: also fall under

(b) दायनिचेपोपनिधि विवाइयुक्ता खीणामनिष्कासिनीनां याधितानां चामुढ्संज्ञानामज्ञरगारज्ञतासिष्धेयु: ॥

(c) साइसानुप्रवेश कलाइ विवाइ राजनियोगयुक्ताः पूर्वराव-व्यवदारिणां च राजिकतासिस्धेयुः ॥

(d) सार्थवजात्रम - याधचाराणां मधेवरखचराणामरखडता-सिस्धेयु:॥

(e) गढ़ाजीविषु चोपधिकतगः सिध्येयुः ॥

(f) निषस्पनवाये चोपकरकताः सिध्येयुः ।

खतोऽन्यया न सिधेयु: ॥-Bk. III, यवदारस्थापना, pp. 147, 148.

this exception.¹ It will be seen that all the cases mentioned here are cases of great emergency. Unless the rule is a little relaxed in respect of people trying to defend themselves from assault, etc., the protection of their life and property would be an impossibility, and it

¹ The exceptions under (i) seem to contemplate such cases as this:—If A promises B to pay a certain sum of money in consideration of his informing a police officer of a burglary that is being committed in A's house, the contract cannot be impeached on the ground that it was made at night.

पूर्व्यात्र व्यवहारिए:--पूर्व्यात्र is the time from dusk to midnight. The use of the word in this sense occurs in Aitareya Brâhmana, Kausika Sûtra, Kâtyâyana Śrauta-Sûtra, Mahâbhârata, Pânini II, i, 45, commentary (see Monier Williams). Those who usually transact business during this time are therefore पूर्व्यावयारिण:. But who exactly are meant is not clear. If we take the meaning to be any persons who enter into contract during gaits then an objection may be raised that if such a case had been contemplated some such sweeping rule as the following would not have been laid down, viz. that any नत्नरुत contracts are void; the general rule could then well have been that all wuttigen contracts are void. Again, if all contracts be allowed up to midnight, why they cannot be allowed, say, a few minutes after midnight would be difficult to explain. Removal of secrecy about the contracts is the general policy, and therefore if all sorts of contracts are allowed during the first half of the night, they will offend against and for the time negative this policy. So it is most probable that only a limited set of persons is the object of consideration of the Government in this case, in view of the hardship that they will otherwise be put to, and therefore yatit autitu: has most likely a technical meaning and refers to a limited group of persons.

is for the same reason, as well as for its own safety, that the State reserves to itself a full contractual freedom. Again, Hindu marriages are never celebrated before dusk, and sometimes the *lagna* (propitious moment) may shift so far into the night as to touch even its small hours; hence it is a necessity that contracts conditioned by such marriages should be sanctioned. As to the exemption relating to the class of persons last mentioned, there is some haziness as to who exactly are meant. The literal meaning of the word, viz. those who usually do their business during the first half of the night, does not carry us very far.

(ii) This exception shows some consideration to diseased pardâh women (चनिष्कारिषणः जीयः). If in a sound state of mind, they can make valid contracts relating to दाय (division of property), निचेप (open deposit), जपनिधि (sealed deposit), and दिवाद (marriage) in the inner apartments of the house, though the general rule is that चन्तरगार contracts are void.

(iii) Exemption is given by the third exception to traders (मुार्थ), त्रजायम, *i.e.* cowherds, etc., hunters (याभ), spies (चार), and those who have to roam in the forests fre-

quently (मधेवरखचर). They can enter into valid contracts in the forest, though contracts by all others in that place are void.

(iv) The fourth exception relates to the जपकर contracts. जपकर, as will appear from the text, refers to any secret place other than the private apartments of a dwelling-house or a forest. The general rule is that any contract in any such secret place is void, the exception being in favour of partners in a concern (निषयम्समवाय).

It should be noticed that in all the four excepted cases, the requirements as to witnesses, or in lieu of witnesses the requirements as to document, had to be complied with, though of course if a case occurs in which neither any witness nor any instrument is available, and which falls within any of the exceptions, it will stand on its own merits, and the judges may try such a suit if they find it possible to do so, or may dismiss it. Another point that should be noted is that if a person tries to make a contract which is void on any grounds, the proposer $(\pi \pi i)$, the acceptor $(\pi \epsilon i)$, the witnesses $(\pi i \pi i)$ and the person who brings together the parties $(\pi i \pi i)$ are all fined.

Now we turn to the legality of the object

(अच्छ) and consideration (वेतन) of a contract. The object and consideration must be legal, and be such as can be upheld by a law court according to equity and good conscience. In the case of a contract in which one party tries to take undue advantage of the other, the court will interfere in favour of the party who is at a disadvantage. A concrete example given in the Arthasastra will make it clear. If a person who is being carried away by flood, or is caught in a fire, or is in danger from wild animals, be rescued on his promise to give to his rescuer not only the whole of his property but also his sons, wife and himself as slaves, the proposer cannot be made to perform his promise, it being opposed to all justice and common sense, and therefore illegal.¹ The rescuer can realize only as much as is fixed by experts (ज़रूबा:) appointed by the law courts. Similarly, in the instance given of a contract with a public woman, improper demand made by her from her paramour or vice versa cannot succeed; the court does not support any such

¹ Bk. III, p. 184,—दासकष्प:, कर्माकरकष्पः॥ नदीवेगजाजा-सेनयाजोपरतं सर्थसपूच्तदारात्यदानेनार्त्तसातारमाङ्रय निसीर्पः क्वग्रसप्रदिष्टं वेतनं दयात् (तेन सर्व्यजार्त्रानानुष्रया याखाताः॥

demand. Likewise, it will be seen from the passages already quoted that the general rule is that all जपाधिकन, i.e. fraudulent contracts, are void, but an exception is made in favour of the spies appointed by Government. They can in their capacity as spies achieve their object by fraudulent contracts and are not penalized for the fraud they commit. It seems to me that cases like the following are contemplated by this rule : A spy, for instance, makes friends with a person whom he suspects to be a thief, and gradually insinuating himself into his confidence, proposes to buy the goods he has stolen. After taking possession of the stolen goods, the spy refuses to pay the value promised and puts the machinery of the law against him instead. In such a case the law court punishes the thief, but it cannot punish the spy as well for the fraud he has committed; neither can the thief bring a suit against the spy on the same ground. Thus the law softens its rigour and legalizes an evil to suppress a greater evil.¹

¹ E.g., Katyayana says: "If λ bribe be promised for any purpose it shall by no means be given although the consideration be performed." (See Colebrooke's *Digest*, vol. i., p. 462, third edition.)

Now that the four kinds of valid contract. नन्नलत, चनरगारलत, चरखलत and उपकरलत. which derive their validity on account of the exceptions laid down, have been dealt with, it is time that we should turn to the valid (तिरोचित) contracts. A place is तिरोचित if it be such that anything done there would be sheltered from human sight.1 It therefore includes an wirt, at as well as उपकर. Now let us look at the matter from another stand-Under cover of night a place may point. become तिरोद्ति, i.e. may be out of view on account of darkness. Therefore a निरोष्टिन place which is परोच has reference both to the nature and situation of the place as well as to time, e.g. night. The general rule is that contracts made in such a place are void, and the exception that attaches to this rule derives its validity from the objects in pursuance of which the contracts are formed. We shall consider the objects shortly, but before doing so, let us inquire whether the validation of a proper तिरोद्ति contract necessarily involves a

¹ परोचेणाधिकर्णयचणनवक्तवकरा वा निरोच्चितास्तिस्थिथु: ॥ Bk. III, p. 147. Here परोच explains निरोच्चित. A निरोच्चित place is one which is परोच, *i.e.* sheltered from human gaze.

deviation from the restriction that night vitiates all contracts. It seems that such a deviation takes place in this case. We see that two classes of objects are mentioned which can validate निरोचिन contracts, viz. (i) ज्वधिकर्णमत्र i.e. contracting a heavy debt, and (ii) objects which are अवस्वयतर, i.e. cannot be expressed and brought into others' notice owing to the delicacy attaching thereto. As to (i), it should be noticed that incurring a heavy debt detracts from the credit and reputation of the debtor and lowers him in the estimation of the people who come to know of it. Therefore, for the benefit of the debtors perhaps, such an exception has been made. Regarding (ii), a difficulty arises as to what kinds of delicate and secret matters are meant. Among the numerous instances furnished by the Arthasastra a valid contract between a woman of the town and her paramour seems to be, from its delicate nature, an instance in point.

We can well see that in a contract which involves a delicate matter, the contracting parties will rather seek the covert of night for the secrecy it can afford and shun by all

means the light of day. In view of this, it is in no wise strange that an express sanction is given to a deviation from the restriction as to night. It should further be stated here that a valid facilta contract also contravenes the general restrictions as to warding, was and way, for it has been already pointed out that facilta includes all the three places.

One word remains to be said to mark out more distinctly the difference between a facilitan contract on one side and the three other contracts on the other. The principal difference lies in the objects of the contract, the objects of facilitan contracts being secret and delicate. There are a few minor differences, which are apparent from the statements already made.

We shall next consider the restrictions as to the चर्म of the witnesses [see passage (\mathbf{x})].¹ The word चर्म appears to be very comprehensive, and signifies everything that the expressions चपवर्षन: and चे परे चा जने in passage (\mathbf{x}) can imply. Kautilya does not explain clearly the restrictions, but they have to be interpreted in the light of what Manu and other

¹ The references here are to the two passages (X) and (Y) quoted in the foot-note at the beginning of this chapter.

such ancient lawgivers say on the point. In Manu the following rule is laid down, viz.—

"Women should give evidence for women, and twice-born men for twice-born men of the same kind, virtuous Sûdras for Sûdras, and men of the lowest caste for the lowest."¹

The commentary of Medhâtithi throws more light on this point. He says that "twice-born men of the same kind " means "twice-born men of the same caste, occupation, etc." The line से परे वा जने कार्य (क़र्यात) जपन्धतः² signifies that a Brâhman should choose a Brâhman for a witness, a Kshatriya a Kshatriya, and so forth; and failing that, a person belonging to another वर्ष may be taken as witness. Therefore the two passages (x) and (y) lead to this conclusion that the contracting parties should try to make their contracts in the presence of castemen of the same sex and occupation as themselves in the first instance, failing which they can take witnesses belonging to the same caste and sex but having a different occupation, and when this also fails, men of a different चर्ण may be called.

Next we consider the rules about the capacity

1 स्तीयां साच्यं सियः कुर्यादिजानां सहगा दिजाः

ग्रुदास सनाः ग्रदानामन्त्यानामन्त्ययोनियः ।--Manu, VIII, 68.

² खग्नवर्णन: refers to the four वर्षे, viz. Brâhmaņ, Kshatriya, Vaišya, and Sûdra. [See passage (Y) supra.] of parties to make a valid contract. No contract can be made if any of the parties be (i) in a fit of anger $(\overline{\mathfrak{R}},\overline{\mathfrak{R}})$, (ii) under stress of extreme sorrow,¹ distress and danger $(\overline{\mathfrak{R}},\overline{\mathfrak{R}})$, (iii) intoxicated $(\overline{\mathfrak{R}},\overline{\mathfrak{R}})$, (iv) insane $(\overline{\mathfrak{R}},\overline{\mathfrak{R}})$, or (v) under undue influence, duress, etc. $(\overline{\mathfrak{R}},\overline{\mathfrak{R}},\overline{\mathfrak{R}})$.

Those who act in supersession of these bars are fined as already pointed out.

In connexion with the subject of contracts made through agents, of which I shall speak presently, a few terms occur which imply some other absolute disabilities so far as the principals are concerned.² अप्राग्न अवस्थर, for instance, indicates an age below which a person cannot make a valid contract on his own account; similarly, अनीत अवस्थर³ signifies

¹ In the case of an agreement with an $\overline{\mathbf{u}}_{1}$ (man in distress), though no contract with him can hold good at law, yet we find that the law court makes him pay a sum fixed by experts ($\overline{\mathbf{g}}\mathbf{u}\mathbf{v}\mathbf{u}$:) if he has already got any benefit from the other party. (See Arthaşâstra, Bk. III, p. 184, $\overline{\mathbf{c}}\mathbf{l}\mathbf{u}\mathbf{a}\mathbf{v}$:.)

² चपात्रयवद्भिद्य कताः, पित्तमता पुत्रेण, पित्रा पुत्रवता, निष्त्नुहोन धात्रा, कनिष्ठेनातिभन्नांग्रेन, पतिमत्या पुत्रवत्या च स्त्रिया, दासादितकाभ्यां, चप्राप्तातीतव्यवस्ताराभ्यां, चभिग्रस्तप्रव्र-जितव्यक्तव्यसनिभिद्यान्यत्रनिख्टव्यवस्तारेभ्यः ।

-Bk. JII, व्यवचार खापना, p. 148.

³ जतीनव्यवहार literally signifies a person who has lost his capacity to contract in any way; but most probably a limit of age is meant.

another disability, due most probably to an age-limit beyond which a person is supposed to lose the amount of discretion that is necessary for making contracts on his own behalf, though he may act as an agent under the instructions of his principal, just as a minor can. Manu and others, however, make decrepit old age (खनिरल) an absolute bar. It should also be noted that an ascetic (प्रबचिन), a person convicted (यागिग्रज), one physically deformed (बङ), or one passionately addicted to any kind of evil practice, e.g. drinking (यसनी), can, according to Kautilya, make contracts on behalf of principals authorizing them, but Kautilya does not clearly state whether they can also enter into contracts on their own behalf. Some of our ancient lawgivers, however, mention a few of the above conditions as nullifying contracts.

One other disability remains to be mentioned. A woman cannot have pecuniary dealings with a man or a woman with whom she is forbidden by law or by her superiors to do so.¹ If she

¹ See Bk. III, p. 156, वियाइसंयुक्ते—प्रतिषेध:.

Cf. Nårada to Indra in the Harivansa: "No man, O thou subduer of foes, should have pecuniary dealings with him from whom he desires much affection, nor visit his wife in his absence."—Colebrooke's *Digcst*, vol. i, p. 16.

violates the prohibition she is punished. This rule applies also to a male.

We shall now consider the rules about the appointment of agents. The following persons, if authorized by the principals, can make contracts as agents :—

(i) Dependents, for the person who supports them, (ii) son, for the father, (iii) father, for the son, (iv) a brother, for another brother though not belonging to the same joint family, (v) a younger brother belonging to the same joint family, for an elder brother, (vi) a woman, for her husband or her son, (vii) a slave, for his master,¹ (viii) a minor ($\underline{w}i \\ \underline{w}a \\ \underline{v}i \\ \underline{v}i$), for one who has attained majority and is otherwise competent to contract, (ix) a person who is $\underline{w}a \\ \underline{v}a \\ \underline{v}a \\ \underline{v}i$, (xi) an ascetic ($\underline{w}a \\ \underline{v}a \\ \underline{v}$), (xii) a physically deformed person ($\underline{w}x \\ \underline{v}$), and (xiii) one addicted to passion ($\underline{w}a \\ \underline{v}i$).²

I shall now name here the principal transactions that bear the character of contract:

¹ For the meaning of चारितक, see Arthašâstra, Bk. III, p. 182, दासकल्प:.

 2 For the text, see supra. The text seems to be a little faulty in its first portion, and so I interpret it subject to some doubt.

(i) ऋषादानम् (loan), (ii) विक्रय (sala), (iii) निचेप (open deposit), (iv) ज्पनिधि (sealed deposit), (v) mortgage, pledge, etc., (vi) hire, (vii) partnership, (viii) contract of service, and (ix) a few other miscellaneous contracts.

From the above we have an idea of the elements that made up **unvert** in Chandra Gupta's time. The elements that constituted a **unvert** may well justify us in calling it a contract, though, of course, owing to the peculiar circumstances of the time in which it prevailed, it assumed a different complexion. We notice also that Government exercised a good deal of control over the details of the subject's life, and therefore legal interference touched spheres now looked upon as merely moral or social. A vagueness necessarily attaches to some of the details of **unvert**, but on the whole we see its broad features and in them a generic likeness to a modern contract.

§ 2.—SALE AND PRE-EMPTION.

We have discussed the general principles underlying Hindu contract in Chandra Gupta's time, and shall proceed to discuss some

of the mone important contractual transactions.

We begin with the sale of immoveable property. The first provision in regard to this is that the piece of property on sale has to be offered for purchase in the first instance to the kinsmen (ज्ञानयः) of the seller. If they do not propose to buy, then the property has to be offered to the neighbours, who can claim such right on the ground of vicinage or participation in the appendages (जामजा:); and on their refusal to purchase, the property is to be offered to the creditors of the seller (धनिका:).¹ These rules evidently indicate that something like the right of pre-emption existed in those days. The texts concerning pre-emption are very few in Sanskrit legal literature, and even those that exist have been explained away by later commentators. I quote here Prof. Jolly's view on this point :---

"A trace of pre-emption in the Hindu law occurs in the text quoted in the Mitâksharâ² and other standard law books. It is

¹ ज्ञातिसासनाधनिका: क्रमेण भूमिपरियद्दान् क्रेतुमस्याभवेषु: । —Bk. III, वासविक्रय:, Arthasåstra, p. 168.

ग्टइवासुकम्; वासु here means ग्टइं चैचमारामम् से तुवन्ध-सड़ाकमाधारी वा, p. 166.

² Colebrooke's Mitâkshara, chap. i, sect. i, 31.

as follows-'Transfers of landed property are effected by six formalities: by consent of fellow-villagers, kin men, neighbours and co-parceners, and by gift of gold and water.' This text indicates clearly the existence in the early period of the Hindu law of a feeling that a transfer of landed property is not valid unless the neighbours, fellow-villagers and others who are but remotely concerned with it should have given their consent to its being effected. These persons might therefore be supposed, perhaps, to have been invested with a right of pre-emption. Whatever notions may have been prevalent on this subject in the early period of the Hindu law, this much is clear, that the compilers of those commentaries and digests of law on which the modern law is based did not approve of any sort of preemption. Thus the Mitâksharâ, in dealing with the above text, deprives it entirely of such legal significance as may have once belonged to it. The consent of fellow-villagers, according to the Mitakshara, is required for the publicity of the transaction merely; but the contract is not invalid without their consent. The consent of neighbours tends to obviate future disputes concerning boundaries. The consent of kinsmen and coparceners is indispensable when they are united in interest with the vendor. If they are separate from him, their consent is useful because it may obviate any future doubt as to whether they are separate or united, but the want of their consent does not invalidate the transaction. This interpretation of the Mitâksharâ may be viewed as an instance of the way in which the Indian commentators used to dispose of obsolete laws. At the same time, it shows clearly that anything approaching to pre-emption was entirely foreign to the ideas of such an eminent authority as Vijñânesvara, the author of the Mitâksharâ."1

A few other texts besides the one referred to above occur also in the Mitâksharâ. They are :—

¹ See also Vivâda Chintâmaņi, translated by P. C. Tagore, p. 309.

(1) "In regard to the immoveable estate, sale is not allowed; it may be mortgaged by consent of parties interested."¹ This text, like the above, is also anonymous.

(2) The text of Brihaspati cited in the Mitâksharâ, viz. "separated kinsmen, as those who are unseparated, are equal in respect of immoveables, for one has not power over the whole to make a gift, sale or mortgage."

The way in which these two texts have been explained away may be found by a reference to their respective sections in the Mitâksharâ.

(3) In a passage in the Mahânirvâņa² Tantra the rules of pre-emption are set out thus :---

"The proprietor of immoveable property having a neighbour competent to purchase it is not at liberty to sell such property to another. Among neighbours, he who is a relation or of the same tribe is preferred. In their default, a friend and the will of the seller prevails; even though the price of immoveable property be agreed upon with another, yet if a neighbour pays the price, he is the purchaser and not another. If the neighbour be unable to pay the price or be consenting to the sale, the proprietor is then at liberty to sell it to another. O Goddess ! if immoveable property be sold in the absence of the neighbour, and he (the neighbour) pays the price immediately on hearing of the sale, he is competent to take it. But should the purchaser, having made houses or gardens, be in enjoyment of them, the neighbour is not entitled to take such immoveable property even by paying the price."

¹ Colebrooke's Mitâksharâ, chap. i, sect. i, 32.

² दादगोसास, Slk. 107 ff., Macnaghten's translation.

The Tantras have never been recognized as authorities on law; neither have these rules been quoted in any current authentic law book. So they have failed to influence the practical law of the present day, and the net result is that, except in Behar and some other provinces of India, the right or custom of pre-emption is not recognized as prevailing among the Hindus; and in the districts where the custom has not been judicially noticed the custom has to be proved in each case.

It is generally inferred from the way in which the commentators explain, or rather explain away, the texts, that it was at the time of the Muhammadans that the right of preemption first came to be recognized among the Hindus. Such an inference cannot be supported if we read properly the mental attitude of the commentators. The later the legal authority, the more hostile is he to restraint on alienations of property. It cannot be denied that the rule, that a member of a joint family cannot sell his share in the joint property without the consent of his co-sharers, aimed at a result similar to that which the Muhammadan law of pre-emption intends to achieve.¹ The provision that a field cannot be sold without the consent of the whole village in particular cases, or without the consent of the family, which certainly existed in ancient times, also points to the same conclusion.²

It is often argued that the absence of a Sanskrit name for pre-emption shows the absence of the custom. Such a position is absurd on the face of it, for what is described at length need not necessarily be named. Besides, in all the cases we have noted, the subject of pre-emption has been subsumed under a more general one which has given its name to the chapter, and so we do not find a Sanskrit equivalent.³

From the above it appears that the custom of pre-emption among the Hindus dates back to a much more ancient period than is generally supposed, and the advent of the Muhammadans

¹ The author of the Dâyabhâga sets aside the rule by saying that sales of undivided shares are immoral but valid in law.

² Vide E. W. Hopkins's Indic Old and New : Land Tenure in India.

³ The word **NUMIT** in Manu VIII, 399, no doubt implies a right of first-purchase or pre-emption, as Monier Williams calls it, but it is claimed by Government, and in regard to moveables (**NUMIT**); therefore it cannot be called pre-emption proper.

only marks a particular stage in its history. The passages in the Arthasâstra serve only as evidence of a custom which is much older than the passage itself.¹

Having now seen how a piece of immoveable property was offered for purchase to certain classes of persons in preference to others in the days of Chandra Gupta, let us turn to further stages in the process by which the sale was effected.

The fact of the property being on sale has to be announced publicly in the presence of a large number of men who come from not less than forty neighbouring houses, and who have no personal interest in the sale.²

As immoveable property includes cultivated fields,³ gardens, enclosed spaces, tanks and reservoirs, each of these kinds of property, before being put to sale, has its boundaries

¹ Vide in this connexion Sivsaranlal's Law of Pre-emption.

² ततोऽन्ये वाच्चास्सामनाचलारिंशत्कुच्या ग्टइप्रतिमुखे वेग्न आवयेषु: । सामनागामष्टद्वेषु चेवनारामं सेतुबन्धं तड़ाकमाधारं वा मर्यादासु यथामेतुमागं ''खनेनार्धेण कः क्रोता" इति चिरा-घुषितवीतमव्याद्वतं क्रोता क्रोतुम् सभेत ।----वासविक्रयः, p. 168.

[For सेतुबन्ध, see p. 60. पुष्पफत्तवाटषखकेदारमूखवापास्-सेतु:।]

³ See f.n. above.

accurately defined in the presence of the neighbouring village-elders and elderly villagers (जामनायामष्टदेषु).

Then the crier (प्रतिकोष्टा) shouts thrice the following words: भनेनाधेंग क: क्रेना, *i.e.* "Who will buy at this price?" thus announcing the price of the property fixed by the seller. The purchaser who accepts the price then enters upon the purchase if the sale be unconditional and not objected to by any claimant.

A tax is levied upon all such sales, and in the event of any increase of price owing to superior natural advantages, the unearned increment goes to the State.¹

The crier is responsible for the collection and payment of the tax on the sale.² Any fraudulent announcement of sale of property of which the seller is not the proprietor is punishable with a fine of 24 panas. No sale

ा खर्गवाधोर्या भूत्ववर्धने भूत्वष्टदिः सग्रात्का कोशं गच्छेत् p. 168.

² विक्रयप्रतिकोष्टा ग्राप्लं द्यात् । चसामिप्रतिकोशे चतुर्वि-शतिपणो दण्डः । सप्तरात्राद्र ईसनभिसरतः प्रतिक्रुष्टो विक्री-णीत । प्रतिक्रुष्टातिक्रमे वासुनि दिश्रतो दण्डः, चन्यत चतुर्वि-शतिपणो दण्डः ॥—Ibid. can be kept in abeyance for more than a week. within which time the possession must be delivered to the buyer and the sale completed. If the purchaser is by fraud passed over and the property transferred to another, the irregularity is punishable with a fine of 200 panas. The punishment for other sorts of fraud is 24 panas.

The following restrictions in regard to the sale of immoveable property are also to be noticed. Tax-payers (arta:) can sell their fields to tax-payers alone, and Brâhmans can sell their त्रस्नदेव or gifted lands to those Brahmans only who are endowed with such lands. Violation of this rule is punishable with the first amerce-Neither can a tax-payer enter on a ment. holding exempted from the payment of taxes. If a tax-payer enters on the holding of another tax-payer, he becomes the owner of the whole property except the house $(\overline{u}\pi\tau)$ of the seller, unless it be given over by express agreement. If a non-taxpayer allows his land to lie fallow, another competent person may enjoy it for five years, after which he has to return the same to the owner after taking due compensation for the improvement made. The non-taxpayer

may live elsewhere, retaining the ownership of his land.¹

It may be noticed in passing that the period of prescription in respect of immoveable properties was usually twenty years, but it does not hold good in the case of the enjoyment of a piece of immoveable property by kinsmen, priests, or by heretics during political disturbances; neither does it apply in cases of mortgage.²

We shall now consider the rules regarding moveables. In the sale of moveables, no elaborate formalities are needed. It appears that in a sale of moveables, property passed by payment of price and delivery of possession.

A refusal to perform a contract of sale, or a refusal to sell an article put for sale by a dealer, was punished with a fine of 12 panas; but if the seller could prove any of the following three pleas he was exempted :---

(1) That the article in question has defects $(\overline{\mathfrak{c}})$.

(ii) That it has been lost by उपनिपान, i.e. has

¹ विवीतचेत्रपथर्डिंसा, p. 171, etc.

² ससामिसम्बन्ध:, p. 190 ff. Cf. Yájñ., II, 24, 25.

been stolen, or confiscated by the State, or destroyed by flood or fire.¹

(iii) That it has been found on examination to be unacceptable because it does not possess many of the properties originally imputed to it, or because it has been manufactured by diseased persons (चविषद्य).

(iv) Another excuse for non-performance of a contract of sale is that a fragile thing contracted for sale to a person cannot be retained longer without detriment to it, and so it has been sold to a third person.

The time allowed for rescission of sale is one night for traders, three for cultivators, and five for cowherds. With regard to the sale of the necessaries of life, however, a period of seven nights is allowed to people of all classes.

A person not accepting an article bought by him is fined 12 panas unless his case has any of the excusing grounds mentioned above.²

If diseased or unclean bipeds and quadrupeds are sold as healthy or clean, the seller is fined

² विक्रीतक्रीतानुरुथ:, p. 187 ff.

¹ Yâjñ. uses the words पण्णदोष and राजदीयोपघात while speaking of non-delivery of sold articles.---II, 259.

12 paṇas.¹ The time for rescission of sale is three fortnights for quadrupeds, but as regards bipeds no time is expressly mentioned in the text. The rescission rule is applicable in the sale of slaves also, and a period of one year is allowed.

The principle followed in these rescissions is that the judges should try to effect them without detriment either to the seller or the buyer as far as possible.

As regards sale through agents (चैया रुपविक्रम),² the following rules are laid down. Agents selling the merchandise of wholesale dealers at prices prevailing at particular localities and times shall hand over to the wholesale dealers as much of the sale-proceeds and profit as is realized by them. If, owing to the default of the selling agents to sell at the proper place and at the proper time, there be a fall in the prices, the agents shall pay the value and profit at the rate which obtained when they received the merchandise. If, however, the wholesale dealers agree to remit the profits, the agreement

² वैयाष्टत्य-विक्रय:,---- औपनिधिक्, p. 179.

¹ Ibid. Cf. Manu, VIII, 222, 223, on Rescission of Sale.

will be carried into effect. In case of a fall in the price, the reduced sale-proceeds would be given to the wholesale dealers. If the agents represent that the goods have been destroyed or lost by जपनिपान (explained above) or in transmission $(\bar{y}\bar{y})$, and if the representation appears reasonable¹ and trustworthy, and is not contradicted by any official report, then the value of the goods need not be made good to the wholesale dealers. The profit and value of the articles would be calculated after making due allowance for all the necessary wear and tear they undergo if they are sold at a distant future, or at a distant place. If the wholesale dealers are combined in a partnership, then each will take his own share of the value and profit or loss. The rest of the rules are to be supplied from those regarding deposit (ত্বনিখি).

Some of the following rules regarding the fraudulent sale of articles² are wide enough and can cover cases in which sale does not come in; but as all of them may also apply to cases

¹ संव्यवसारित—generally intelligible, *i.e.* reasonable.

^{*} अखामिविज्ञय:, p. 189 ff.

where a sale is involved, they have been put here together.

On the detection of a lost article in the possession of a person, the owner will cause him to be arrested by the order of the judge of a court; if, however, time or place does not permit this process, he can arrest the person himself and realize the article. The judge shall put this question: "How have you got the article? If he narrates how he got it, but cannot produce the seller, he will be acquitted, but will lose the article. If the seller is produced, he shall pay not only the value of the article but will also be liable for theft. If the seller runs away or hides himself with the article till it is wholly consumed, he shall not only pay its value but also be liable for theft.

After proving his title to the lost article, the owner shall be allowed to take possession of it; but on failure to prove his title, he is to pay a fine of five times the value of the thing, and the State takes the article. If the owner takes possession of a lost article without obtaining permission of a court, he shall be punished with the first amercement.

Stolen or lost articles, on being detected by persons other than the owner, are to be deposited at x_i and i.e. the place for the collection of tolls. If no claimant be forthcoming, such an article is taken by the State.

He who proves us title to a lost or stolen biped shall pay 5 panas as ransom (forma) before taking possession. Likewise, the ransom for a single-hoofed animal (vagva) is 4 panas; for a cow or a buffalo, 2 panas; for minor quadrupeds, $\frac{1}{4}$ pana; and for precious stones, etc., 5 per cent. of their value.¹

Whatever of the property of his own subjects the king brings from forests or countries of enemies, shall be handed over to its owner. Whatever of the property of his subjects stolen by thieves the king cannot recover, shall be made good by the State. If the king be unable to recover such a thing, he shall allow any person who volunteers to fetch it; otherwise, he shall pay an equivalent compensation to the sufferer.²

¹ Cf. Yâjñ, II, 171-177.

² अस्तामिविज्ञय:, p. 190. A parallel to the liability of the State for compensation to the injured party for loss of the sort mentioned above is to be found in Manu, VIII, 40; Yajñ., II, 37, Ownership in properties continues though the owner is away from the place where they lie, but the owner who neglects to question the enjoyment of his moveables by another for ten years continuously loses his right therein. The aged and the minors, the diseased and the distressed, the sojourners abroad and those who have forsaken their country for good, are exempt from this rule. The exemption also applies to cases where the assertion of title is prevented by absence due to political disturbances, as also to open and sealed deposits, pledges, treasuretroves, women, boundaries, and articles belonging to the priests and the State.¹

§ 3.—LOANS.

We shall now discuss the subject of loans. The rules regulating loans are justly recognized to be of great importance, for on them depends

^{275;} and Nårada, II, 17. It is interesting to note that a similar provision has also been incorporated in the Manu-Kyay-Damathat of the Burmese law: 'If cattle have been stolen, the inhabitants of that district were held liable to which the footmarks of the stolen cattle are traced."—Richardson's Transl., IV, 3, p. 117.

¹ अस्तामिविक्राय:, संस्वामिमन्तरू:, p. 190 ff. Cf. Manu, VIII, 145-149.

to a large extent the economic welfare of the country, राजन्ययोगचेम as Kautilya puts it.¹

In those olden days the exploitation by the grinding money-lenders of the necessities of the poor and the needy was checked by a fair rate of interest. The fair rate was determined by the State, which punished all deviations from it.

The legal rate ² of interest for a money-lender, as mentioned in the Arthasâstra, is $1\frac{1}{4}$ p.c. per

¹ च्हणाद्ानम्, Bk. III, p. 174.

² This rate of interest, viz. 14 p.c. per month, is also found in the Sanhitâs. The question is whether it was charged on a secured debt or not. Vyâsa is very explicit on this point. He says: "Monthly interest is declared to be an eightieth part of the principal, if a pledge be given; an eighth part is added if there be only a surety; and if there be neither pledge nor surety, two in the hundred may be taken from a debtor of the sacerdotal class" (see Cole.'s Digest, i, 30). Yajñavalkya also makes 1¹ p.c. per month the interest on a secured loan, for he enjoins that "on a secured loan the interest every month is one-eightieth part of the principal" (II, 38, M. N. Dutt's ed.). Manu. Vasishtha and Narada are at one on this point. "A moneylender may stipulate, as an increase of his capital, for the interest allowed by Vasishtha, and take monthly the eightieth part of a hundred " (Manu, VIII, 140, S. B. E.). According to the commentators Kull., Nar., Ragh., and Nand., the rule refers to a secured debt, but Med and Gov, think that the rule refers to cases where the creditor is able to live on this interest and is not compelled to take a higher rate for his living. However, the former is the view accepted on all hands, supported as it is by the parallel passages of Yajñ., etc. (see also Cole.'s Digest, i, 24). Vasishtha's text runs thus: "Hear the interest for a money-lender declared by the words of Vasishtha: 5 mashas for month, *i.e.* 15 p.c. per year. For the reasons given below, it seems that this rate of interest was chargeable on secured debts, the maximum rate allowed on unsecured ones being prescribed

In view of the general correspondence of the Sanhitâs as to the rule that 1½ p.c. per month is the interest to be charged on a secured loan, I am inclined to take the passage in Kautilya, "**UNTED**" **UNTED**", as applicable to secured loans. This view gains further support when we take into account the fact that no separate rates of interest are

²⁰ kârshâpanas may be taken every month; thus the law is not violated " (II, 51, p. 16, S. B. E.). One kârshâpana being equal to 20 mashas, the rate is 1¹/₄ p.c. per mensem. Narada also refers to Vasishtha: "Let a money-lender take in addition to the principal the interest fixed by Vasishtha, viz. an eightieth part of a hundred ir every month" (I, 99, S. B. E.). Brihaspati prescribes an eightieth part of the principal to be the interest on it every month (XI, 3, S. B. E.), while Gautama says: "The legal interest for money lent is at the rate of 5 måshas for 20 kårshåpanas per month" (XII, 29, S. B. E.). On the strength of the other Sanhitâs, these two passages would no doubt be taken to relate to the case of secured loans. Baudhâyana, however, differs from all the above authorities by prescribing a different rate of interest, viz. 1 p.c. per month. His rule is that "a sum of 25 karshapanas shall bear an interest of 5 måshas per mensem " [I, 5, 10-(22), S. B. E.]. He does not expressly apply it to cases of secured debts; but even if it be taken to apply to unsecured loans, the difference from the other Sanhitâs does not cease; for almost all the authorities quoted above, including Vishnu and Hârîta, expressly mention that the creditor may take 2, 3, 4 and 5 p.c. (and not more) as monthly interest on unsecured loans according to the order of the castes. e.q., a Brâhman debtor has to pay 2 p.c. per month, a Kshatriya debtor 3 p.c. per month, and so on. So Baudhâyana is the only dissentient authority in regard to this point.

by the next passage as 5 p.c. per month. But the rate is allowed to increase in view of the risks to which the investment of the money lent, and consequently its realization,

mentioned in connexion with the rules regarding pledges, upon one kind of which, viz. where the thing pledged is used by the pledgee, interests are chargeable; nor are they mentioned in regard to rules about mortgages.

The rate of interest allowed by the Sanhitâs in the case of the Sâdra debtors, viz. 5 p.c. per month, corresponds with that given in the second passage of the Arthašâstra (क्यादान, p. 174, Bk. III): "परपपा यावदारिको"; and as the Sanhitâs apply the rule to unsecured loans, I am inclined to think that the passage of Kauțilya mentions the maximum rate allowed in the case of unsecured loans.

Laws restricting the maximum rate of interest are found in many countries both of ancient and mediæval times. In Greece, "the Seisachthira of Solon (B.C. 594), according to some ancient writers, included a reduction of the rate of interest, stated by Plutarch to have been about 16 p.c. per annum. In the opinion of Grote, however, no restriction was put by it upon interest. At Coreysa, in the second and third centuries B.C., loans on good security commanded 24 p.c., while the common rate at Athens in the time of the Orators was 12 to 18 p.c. . . . Such high rates were exceedingly oppressive to agriculturists, whose fortunes are always precarious" (Palgrave's *Dict. of Pol. Ec.*).

According to the same authority, "the ancient law of Rome allowed interest which, as usual in agricultural communities, reached an exorbitant height, and popular suffering necessitated a readjustment of debts. The law of the Twelve Tables (B.C. 451-450) first, according to Tacitus, limited the rate to onetwelfth part of the capital. . In B.C. 347 interest was fixed at 5 p.c.; in B.C. 342 it was abolished altogether by the Lex Genucia. Although the prohibition of interest long remained law, it was found impracticable... The Lex Unciaria of the are exposed. Accordingly, the money borrowed by persons going to forests for trade is allowed to return an interest of 10 p.c. per month, while, on the same principle, the interest payable by the merchants who trade by sea is allowed to mount up to the maximum rate of 20 p.c. per mensem.¹

A disregard of the maximum limits is punished with fines payable not only by the money-lender and the intermediary, but also by the witnesses to the transaction.²

Diodorus the Sicilian, who visited Egypt in the middle of the first century B.C., gives us some information about the early Egyptian law on this point: "For those that lent money by contract in writing, it was not lawful to take usury above what would double the stock, and that payment should be made only out of the debtor's goods, but his body was not to be liable in any wise to imprisonment; and those were counted the debtor's goods which he had either earned by his labour, or had been bestowed upon him by the just proprietors." (Diodorus, vol. i, Bk. I, ch. vi, p. 81: transl. by C. Booth.)

¹ "द्रापणा कान्नारकाणां." Yûjñ. uses the word कान्नारग in a similar context---

कान्तारगाखु दण्रकं सामुदा विंग्रकं ग्रतम् द्युर्ष्वा सकतां दृद्दिं सैर्व्वे सर्व्वासु जातिषु—II, 39. ² ततः परं कर्त्तुः कारयितुञ्च पूर्व्वम्साइसदण्डः । श्रोतॄणामे-कैकं प्रत्यर्धदण्डः ।

Consuls Sulla and Rufus fixed the rate of interest at 12 p.c. per annum...By a decree of the Senate in B.c. 50 this became the legal limit throughout the Roman provinces."

The interest on grain in seasons of good harvest shall not exceed more than half its quantity when valued in money, that on the capital contributed by the members of a commercial company shall be one-half of the profit and be payable as each year expires. In case of partners who by long absence or by maladies such as idiocy are disabled from participation in the business, they may be discharged from partnership by being paid twice the amount of their original capital.¹

A person claiming interest when it is not due, or claiming as principal the sum-total of the real principal and interest, shall pay a fine of four times the amount under dispute. False claims were punishable with fines of four times the amount falsified. If both the debtor and the creditor mis-state their claims, the punishment is divided between them in the proportion of 1: 3.

The following persons were exempted from

¹ The text is चिरप्रवासं सैभाप्रविष्टो वा मूच्यदिगुणं दद्यात्। p. 174. It seems that "सभाप्रविष्ट:" should be "सभाप्रविष्टं." In "वाचच्यात्य," "सभा" has been explained as "जड़ता," by which no doubt such maladies as insanity, idiocy, etc., are meant. One suffering from these would be सभाप्रविष्ट.

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payment of interest: (i) persons engaged in long-continued sacrifices, probably in view of the general good believed to have been produced thereby; (ii) the diseased; (iii) those detained in the house of their preceptor for studies; (iv) minors; and (v) the indigent.

The repayment of debts is also subject to the following rules.¹ The creditor is fined 12 panas if he refuses to accept in proper time the sum due, unless the refusal be founded upon some adequate grounds. Moreover, in case of refusal, the sum tendered may be deposited by the debtor with some third person, and no interest accrues upon it for the time subsequent to the date of deposit.

The creditor is liable to a penalty for want of diligence on his part to realize his money within ten years next following the due date; for after this period the loan is barred by limitation. But exceptions are made in favour of (i) the senile, (ii) the diseased, (iii) the dis-

¹ Cf. Yájñ., II, 45: "If a creator, for the multiplication of his own money, does not take it when offered back by the debtor, and if the latter deposits it with an umpire, interest ceases from that date."

tressed, (iv) minors, (v) sojourners in other countries, (vi) persons who have forsaken their country (देशत्यागी), and (vii) those who are prevented from claiming their dues owing to political or other disturbances.

The sons of a deceased debtor shall repay the principal with the interest thereon. If the deceased have no sons, the debts shall be paid by those who inherit his property; or the debt shall be paid by the surviving joint-debtors if it were contracted jointly with them.¹ Where there are sureties for payment, they shall be held liable.

The rules as to surety for payment of a debt are: A minor cannot stand as surety. If there be no restrictions in the contract of surety as to time or place, it shall be borne by the sons, grandsons, or any persons inheriting the property of the deceased surety in case the debt be not paid by the debtor. They have also to bear the liability of the deceased person as surety in regard

¹ प्रेतस्य पुचाः क्रुसीदं दद्युः । दाघादा वा रिक्षडराःसडगा-च्रिषः प्रतिभुवो वा ।

Cf. Yájñ., II, 51, 52; Vishņu, VI, 27, 28 ff.; Manu, VIII, 166; Nårada, I, 2 ff.; and Brihaspati, XI, 48 ff. to (i) personal services, (ii) marriage-dowry, and (iii) transactions concerning immoveable property.

When there are several debts owing by a single person to several creditors, two creditors cannot sue the debtor simultaneously except in the case of resistance by the debtor,¹ and in the suit the order of the debts has to be proved before the court.

No suit for aebt can lie between husband and wife, father and son, and brothers of undivided interests. Cultivators and Government servants cannot be apprehended during working hours for debts contracted by them. The wife is not as a rule liable for the debt of her husband even if it be acknowledged by her, except in the case of debts due to herdsmen and cultivators.²

A husband is liable for the debt of his wife, and if he absconds without making any provision for the debt, he shall be fined with the

¹ प्रतिष्ठमान—resisting. (Monier Williams.)

² The meaning of this exception is to safeguard the interests of these useful occupations for the benefit of the public.

The text has आईसीति. Yâjñ. uses the word आईसीरिन् (I, 168) in the sense of "a cultivator who takes half the crop for his labour."

highest amercement. If he denies the debt, witnesses are depended upon.¹

§4.—DEPOSIT, ETC.

The next item for our consideration in connexion with concract is the law relating to deposits.

There were two kinds of deposit, viz.:-

- (i) Sealed (जपनिधि) and
- (ii) Open (निचेप).

A sealed deposit, according to Yâjñavalkya, is an article enclosed in a box under seal which the owner delivers into the hands of the depositary without saying anything as to its nature.² An open deposit is not put under any cover, and the nature, quality, form, etc., of the

¹ In the Sanhitås, *e.g.* in Yâjñ., II, 47 and 49; Nârada, I, 18, 19; Brihaspati XI, 50, 53; and Vishnu, VI, 32, 87, the husband is not as a rule liable for the debt of his wife unless it be contracted for the benefit of the family. Among herdsmen, washermen, hunters, distillers of spirit, etc., the husband is invariably liable for the wife's debt, because "the income of these men depends on their wives, and the household expenses are borne by them also."

² Yâjñ., II, 66 (M. N. Dutt's ed.); also Nârada, II, 5 (S. B. E.). Brihaspati, XII, 3 (S. B. E.), runs thus: "When a chattel enclosed in a cover and marked with a seal is deposited without describing its nature or quantity and without showing it, it is termed an *aupanidhika* deposit."

The commentary (in Colebrooke, i, 272) on Narada cited in

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article deposited are known to the depositary at the time of making the deposit.

The rules as to sealed deposits apply mutatis mutandis to open deposits, and vice versa.

¹ The fine is चतुर्गुणपद्यवन्त. I have already pointed out the difficulty of giving a meaning to पद्यवन्त्र consistent with its use in other passages, *e.g.* that at p. 176, Arthaśâstra.

the Mitâksharâ should be noticed: "'Nârada cited in the Mitâksharâ': When a thing is deposited under seal, without mentioning its quantity, if its kind and form be unknown, it is considered an *upanidhi*; but the wise call a specified deposit *nikshepa*.

[&]quot;'If its kind and form be unknown': if the depositary know not whether it be gold or silver or what. 'Under seal': secured by a private knot to prevent its being taken by another person, or secured by the impression of a seal on which particular letters are engraved; when a thing is so deposited, the bailment of it is *upanidhi*. A specified deposit (or the bailment of a thing of which the quantity, kind and form are mentioned) the wise call *nikshepa*."

or wilfully destroyed, its value is realized from the depositary. He is, however, exempted from liability if the deposit is lost, destroyed or damaged through no laches on his part, $e.g.^1$ by the ravages of hostile kings, wild tribes, or other invaders; by vis major such as flood or fire; or, during transit at sea, by the ship sinking or being plundered by pirates.

The deposit must always be returned to the actual depositor; otherwise the depositary is answerable.² If the depositary denies having received the deposit, the antecedent circum-

¹ प्रेस वसनगत वा नोपनिधिमधाभवेत् ॥ (p. 178, *ibid.*). This passage most probably contemplates the destruction of the deposit along with the property of the depositary, in which case neither the deposit nor compensation can be demanded from him by the depositor. This meaning of the passage enables us to distinguish the case from those of destruction of the deposit by vis major, etc., at p. 177, which also excuse the depositary from all liability. The interpretation of the passage, viz. "When the deposit shall not be sued for," is opposed to all reason and justice; for, should not the heirs who get possession of the deposit along with other articles of the deceased, or the depositary himself though involved in calamity, be held responsible for the return of the deposit?

For a parallel to the meaning that seems to me more reasonable, *vide* Nårada as quo⁺ed in Colebrooke, i, 282: "What is lost together with the property of the bailee is lost to the bailor; so if it be lost by the act of God or of the king, unless there was a fraudulent act on the part of the depositary."

² Cf. Manu, VIII, 185.

stances are examined; moreover, Kautilya by way of example mentions a few dodges which are employed in such cases to find out the truth, and which are similar to those enjoined by Manu. These artifices are meant for the protection of unwary people against the wiles of dishonest depositaries. The artisans, says Kautilya, are a class of this sort. They are very clumsy and incautious in their dealings, and make deposits without any evidence, documentary or otherwise. It is for such people specially that the aforesaid procedure is meant. Manu prescribes that "on failure of witnesses, let the judge actually deposit gold with the defendant under some pretext or other, through spies of suitable age and appearance, and afterwards demand it back. If the defendant restore it in the manner and shape in which it was bailed, there is nothing of that description in his hands for which others accuse him. But if he restore not that gold, as he ought, to those spies, then he shall be compelled by force to restore both the deposits."1 The honesty of the bailee in the second transaction is taken as an index of his integrity in

¹ Manu, VIII, 182-184.

the first. This is the key to the various means mentioned by Kautilya for testing the honesty of the bailee. When a defendant denies having received an open deposit, for which there is no evidence, the plaintiff, with the sanction of the judge, takes a few men to the house of the depositary, stations them in a secret part of the house, but within hearing, and then goes to the bailee as if alone; and in the course of conversation with him tries to make him say the truth. The plaintiff may very likely succeed in the attempt, for the bailee does not know that he is being overheard by other people who will bear witness against him. If he unwarily says anything that may favour the plaintiff in his claim, the judge uses it when deposed to by the witnesses.

Another method used to elicit the truth is to employ a spy, who, in the guise of an old, diseased merchant, appears before the defendant depositary as if after a long journey through a forest, or in the middle of his professional tour, and seeks as a measure of relief to leave with him his chattels secretly marked. After some time he sends his brother or son to take back the articles. If they are re-

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turned quietly, the bailee proves himself honest; if not returned, he is found guilty in this as well as in the previous transaction and visited with the punishment prescribed for theft.

A third trick employed for the same purpose is that of a spy, in the guise of a respectable gentleman bent on renouncing the world, leaving an article in the hands of the defendant bailee. After a while he returns and claims it. If it is not returned, the bailee is punished as above.

Similarly, a spy may pretend to be a simpleton, and at night represent to the defendant bailee that for fear of being arrested on suspicion by a police officer for carrying an article through the streets, he wishes to leave it with him. Accordingly, he leaves it in his custody. But, in spite of this precaution, a police officer (who seems also to be employed to help him in this artifice) arrests him and puts him in $h\hat{a}jat$, whence he demands the deposit back. If the bailee restores it, well and good; otherwise, he is punished.

In these cases the chain of transactions by which the article in dispute passed into the

defendant's possession, the validity of those transactions, and the social and financial position of the plaintiff are carefully examined.

These artifices, it seems, were more frequently needed for cases of open deposit than for those of sealed deposit, the reason being that open deposits were often made in a hurry, the depositor having hardly any time or opportunity for taking precautions as to witnesses, etc.¹

Pledge (चार्षि).

Kautilya does not expressly mention the rules to be followed when the article pledged is used, sold, pledged, lost or misappropriated, but leaves them to be inferred from the allied rules laid down in connexion with deposit. If the pledge be coupled with the condition that it will be used by the pledgee, then the pledgor can release it at any time he likes, and no interest is charged. In other cases the time is limited, and the interest accrues due

¹ The materials for this pa. of the section have been drawn from Bk. III, pp. 177, 178, 180–181, except where otherwise indicated.

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for the period. A pledgee who refuses to return the pledge when duly demanded back by the pledgor is fined 12 panas. If the latter goes to release the pledge at a time when the former is away from home, he can redeem it by paying the money to the elders of the village;¹ or the then value of the pledge being ascertained, it may be left where it is, and interest ceases to accumulate.² If there be an apprehension that the pledge may depreciate, it may be sold, with the permission of the court, in the presence of the superintendents of pledges (आधिपाच), or of special Government officers (for whom, see $infra^3$), or in the presence of the pledgor alone.

Mortgage.

A piece of mortgaged immoveable property may be of two kinds, viz. (i) yielding income without any labour, (ii) yielding income after labour being spent on it. When the money lent, as well as its interest, has been realized

¹ Cf. Yâjñ., II, 63.

² Yâjñ., II, 64.

[े] अनाग्रविनाम् करणा:, lit officers who provided against loss or destruction.

from the income of the mortgaged property it shall be returned to the mortgagor with its value undiminished. If the mortgagee enjoys the mortgaged property without the sanction of the mortgagor, then it shall be returned with compensation for such enjoyment, after the capital lent is realized.¹

The rest of the incidents of mortgage are like those of deposit, with the necessary modifications. As regards the mortgage of lands, the restriction is that the revenue-paying lands can be mortgaged only to holders of such lands, and Brahmadeya (*i.e.* given away to Brâhmaņs) lands only to owners of similar lands.²

Âdesa (bill of exchange), etc.

Two other forms of contract next engage our attention, viz. $\hat{A}desa$ ($\forall \forall \forall \forall n$) and $Anv\hat{a}dhi$ ($\forall \forall \forall \forall \forall \forall n$). An $\hat{a}desa$ is literally an order, and it seems to mean an order to a third person to pay up a sum of money on behalf of the sender of the order. It is akin to a modern bill of exchange in its simplest form. $Anv\hat{a}dhi$ is, as

 ¹ Cf. Yâjñ., II, 68, p. 178, Arthaśâstra.
 ² Bk. III, p. 171.

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Kâtyâyana puts it, "a bailment for delivery."¹ Its incidents, according to Kauțilya, are as follows :—It a person entrusted by a merchant with an article for delivery to a third person does not reach the destined place, is robbed on the way by thieves, breaks the article or abandons it, the merchant shall not be responsible; nor the kinsmen of the carrier if he dies on the way. Kauțilya does not expressly mention other incidents of these two forms of contract, but leaves them to be inferred from those of deposit.

In loan for use (याचितक)² and hire (खनकोतक), the article which forms the subject of the transaction has to be returned to the owner in the state in which it was received; but if it be lost or destroyed by lapse of time, by flood, fire or rough transit, by being confiscated by the State or stolen by thieves, it need not be made good.³

¹ Colebrooke, vol. i, p. 273. "Kâtyâyana: 'When a thing is bailed with these directions, viz. deliver this, as by my desire, to such a man when he shall demand it for his own business, it is called *anvâdhi*.'"

² Vide Colebrooke, vol. i, p. 273; for fine prescribed for not returning article hired or borrowed, vide Bk. III, p. 198, Arthasastra.

³ Bk. III, Arthasâstra, p. 198, adds: "When a person does not return at the required time or place the property that has been hired or borrowed, pledged or deposited, he is fined 12 panas."

The rules of *open deposit* apply to these two forms of contract as far as possible.

Contract of service.

People near at hand should be called to witness the nature of the contract between a master and a servant. The wages fixed by mutual agreement shall be paid to the servant, but if no such wages have been fixed, then it will be in proportion to the time spent and the quality and quantity of the work done. If the wages be not settled, a cultivator shall generally obtain one-tenth of the crops grown by his labour, a herdsman one-tenth of the butter clarified by him, and a commercial agent one-tenth of the business transacted by him.¹

Artisans, artists, musicians, physicians, buffoons, etc., shall each get wages like others of his profession, or such wages as will be fixed by experts on evidence adduced. If no evidence be produced, it will be in proportion to the work performed. Fines are imposed for non-payment of wages, as also for denial of wages due.²

¹ Bk. III, p. 183, Arthaśâstra.

² Ibid., p. 184.

A servant neglecting or not doing work for which he has been paid is fined 12 panas. When incapable of working, or refusing to work on the ground that he is diseased, distressed or that the work is servile, he may get exemption, or take leave to have the work performed by a substitute whose wages will be in proportion to work done by him.1 An employer refusing to accept the work duly performed by a workman, as also an employee not doing the work for which he has been engaged, is fined 12 panas, and the latter must never desert his work for a more lucrative job elsewhere. If an employer does not accept the services of a workman who according to contract presents himself for it, the latter will be deemed to have done his full duty. This is the view of some legal authorities, but Kautilya differs from them, and holds that wages should be given only for work actually performed and not for that left completely unfinished. If, however, the employer works the labourer ever so little and then unreasonably dismisses him, the unfinished work will be looked upon as finished and wages cal-

¹ Lines 1 and 2, p. 185 of the text seem to be defective.

culated accordingly. Variations of time or place are sufficient grounds for the annulment of a contract for service, and any work in excess of what is contracted for goes for nothing.

These rules also apply to workmen who have formed themselves into an association, with this difference that a grace of seven days is allowed them after the fixed period, after which they can have the work done by substitutes. Without the leave of the employer, they must never leave anything in the place of work or remove anything therefrom; for the former offence the fine is 12 papas, and for the latter 24. The members of an association may each receive the wages agreed to by him, or may divide the total wages earned by them all equally among themselves.¹

An agricultural labourer refusing to work for the person by whom he has been called from a different place, is fined twice the amount of his wages, and double the price of food and drink with which he may be provided. If he has been called for work in connexion with a sacrificial performance, he is fined twice his

¹ For the above, vide Bk. III, pp. 184, 185, Arthasastra.

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wages on his refusal to work. The fines thus realized go to the village fund.¹

Partnership.

(a) Traders or cultivators who engage in work after joining partnership shall apportion among themselves the profits, after the performance of the work in hand and before entering on a fresh one. The performance of work by a substitute does not abate the share of profit due to a partner. The traders shall have shares of profit of the partnership business immediately after the commodities in stock are sold out. The losses sustained by the goods during transmission are to be borne by the partners equally.

A partner deserting his work is fined 12 panas, for he cannot withdraw from the business at will after it has been commenced. Theft committed by a partner for the first time should be pardoned and his dues paid; but a second such offence, as also his second untimely withdrawal, causes his expulsion from partnership. In grave offences, he is, in addition, treated as a criminal.

¹ Bk. III, p. 173, *ihid*.

The shares of profits of the partners may be equal or otherwise, according to contract among themselves.¹

(b) Priests officiating at a sacrifice shall share their earnings equally or as agreed to, over and above what may be specially due to each for his portion of work.

In sacrifices like Agnishtoma :---

A priest dying after the rite of Consecration is entitled to one-fifth of what he would have received for his full work.

A priest dying after the rite of Somapurchase is entitled to one-fourth of what he would have received for his full work.

A priest dying between the rite of Madhyamopasat and end of that of Pravargyodvâsana is entitled to one-third of what he would have received for his full work.

A priest dying after the rite of Maya is entitled to one-half of what he would have received for his full work.

A priest dying after the rite of Prâtaḥsavana (libation of Soma during Sutya ceremony) is entitled to three-fourths of what he would have received for his full work.

¹ For the above, vide Bk. III, pp. 185, 186, Arthaśâstra.

A priest dying after the rite of Madhyandina is entitled to the whole share, for by that time the sacrificial fees are all paid.

In every sacrifice except Brihaspatisavana the sacrificial fee is paid.

The above rules also apply to the fees paid during the series of sacrificial days called Ahargana.

During the ten days immediately following the death of an officiating priest, his work is performed either by those who are given their dues from the remnants of the offerings after the share of the deceased is paid, or by those who enjoyed his confidence.¹

The death of the sacrificer himself must not put an untimely stop to the sacrifice: the priests are bound to finish it. The desertion of a priest or a sacrificer, one by the other, is punished with the first amercement. If the priest be a Brâhman who does not maintain a perpetual sacred fire, he is fined 100 panas, while the head priest and the sacrificer are each fined 1000 panas for such offence.

¹ The time-limit is ten days, because the near relatives of the deceased remain in mourning during the period. They continue the work after the lapse of the period.

As a sacrifice is defiled if an officiating priest happens to be the husband of a Sûdra wife, a thief, spirit-drinker, Brâhman-slayer, violator of teacher's bed, or receiver of condemned gifts, it is no offence to dispense with his services.¹

Contracts of common interest.

If preparations are made for a public entertainment, an individual may help it up at will, either by subscription or otherwise; but in case he does not join it, then he and his dependents lose the right of enjoying it. Seeing or hearing stealthily at the place of entertainment is punishable with fines.²

² Bk. III, p. 173, Arthasâstra.

¹ For the above, *vide* Bk. III, p. 186, Arthaśâstra.



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