

THE MĀTAṅGA-LĪLĀ

Translated from the Original Sanskrit

by

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TRANSLATOR'S PREFACE.

About three years ago Phya Indramontri (Mr. F. H. Giles) was studying the elephant lore of Siam, and, as Siam is a cultural colony of India, he asked me to recommend some Indian book on the same subject for comparative study.

Even in Bangkok, so far away from India, there is a good collection of Sanskrit books at the National Library, which contains four treatises on elephants. One of these consists of only thirty-three stanzas and forms the 287th chapter of the AGNI-PURĀṆA. Besides being short it is limited in scope too as it is made up mostly of prescriptions for some of the diseases of the elephant. It has already been translated into English by Mr. Manmath Nath Dutt and published by him at Calcutta in 1904.

Another treatise is found between verses 172 and 331 in the third chapter of MĀNASOLLĀSA, an encyclopaedic work composed under the patronage of King Someçvara Bhūlokamalla some time about 1131 A. D. The text has been published as No. XXVIII of the Gaekwad's Oriental Series at Baroda, India, in 1925, and I believe it has not yet been translated into English. But the information contained in this book also is very limited, though much less so than that found in the Agni-Purāṇa, and is comprised under five heads, namely: 1. the habitats of elephants in India, 2. the methods of capturing elephants, 3. their good points, 4. their different breeds, and 5. the methods of training them.

The third treatise called HASTYĀYUR-VEDA, which also has not yet been translated, is a very voluminous work attributed to the sage Pālakāpya, and has been published by the Ānandāçrama press, Poona (India). This book is written on the lines of a veterinary manual: although it has got much to say on other subjects besides the diseases of elephants and their treatment, generally such information has been arranged piecemeal under one medical topic or another in a way that is very uninteresting to a lay reader. Also, I did not have enough leisure to attempt translating an abstruse work consisting of 717 pages.

The fourth treatise, the MĀTAṅGA-LĪLĀ published by the Government of Travancore in South India in 1910 as No. X of the "Trivandrum Sanskrit Series," is small in bulk but rich in the variety of its contents, and, above all, it professes to be a summary of the "Hastyāyurveda" which is considered to be the most authoritative Sanskrit treatise on elephants. But three years ago there was no English translation of the "Mātāṅga-lilā" and I was therefore obliged to make one for the use of Phya Indramontri. Recently when Phya Indramontri asked for my consent to have my translation published in the Journal of the Siam Society, I had learnt that a translation by an American Sanskritist, I think by Prof. Edgerton, had already been published. But as I remembered that many important portions of the Sanskrit text are obscure, I decided that there is room for another independent translation even if it should prove to be the worse.

The edition of the Sanskrit text was based upon three manuscripts, all from the same part of the country, the west coast of South India (where wild elephants are met with even to-day). The editor of the text therefore infers that Nilakaṇṭha, its author, might have been a native of that part of India. The author also gives a vague clue to his home and age in the opening stanza where he praises the local deities of a Rājarāja-maṅgalam. "Maṅgalam" is a word usually found added to the names of villages presented to Brahmins (members of the priestly caste of India). Thus Rājarāja-maṅgalam was obviously the gift of a king named Rājarāja ("King of Kings") or the gift of his vassal or subjects to commemorate his name, for both practices were fairly common in ancient India. Some South-Indian kings have assumed the title of "King of Kings", and the earliest of them known to history ascended the throne of the Chola empire in 985 A. D. It may therefore be inferred that Nilakaṇṭha, the author of Mātāṅga-lilā was intimately connected with the village of Rājarāja-maṅgalam,

was probably a native of it, and could not have lived before the Xth century of the Christian era.

Again there are remarkable verbal resemblances between the VIth chapter of Mātāṅga-līlā and a part of the "Kṣatriya-varga" in the vocabulary of Amara, which are very marked in the second half of the 9th stanza of the former, which is the same, word by word, as the second half of the 28th. stanza of the latter. But this is not helpful chronologically since the date of Amara has not yet been settled to the satisfaction of all. Another marked verbal affinity, that between the 13th stanza in the VIII chapter of Mātāṅga-līlā and the 269th. verse in the III chapter of Mānasollāsa, would prove that if the former is copied from the latter, Nilakaṇṭha could not have composed his work before 1131 A. D. unless, of course it be that the authors of Mātāṅga-līlā and Mānasollāsa had both copied from a third work.

In a small work of which the Sanskrit barely covers forty-one pages (8vo), the author has managed to compress all the information he could give about elephants: the myths manufactured by the ancient Indians to explain the peculiar anatomical structure of the elephant which "may be thought to result from a union of the *"disjecta membra"* of animals most diverse and far separate from each other in the zoological series",⁽¹⁾ the points fancied in elephants, size, rate of growth and signs of age of these animals which even in the old days must have cost dearly to buy and maintain, their treatment in health and disease with solicitude due to such valuable property, which, formerly, could often help to win a war—in fact almost all that an intelligent lay man would care to know of the elephant lore of ancient India, and also much practical information which even an elephant-owner of to-day needs to know but cannot obtain from the modern manuals.

Besides this wealth of information the author brings into his work a genuine interest in the elephants and much sympathy which invest portions of his book with a true poetic quality. Critics often fail to praise a writer in Sanskrit for the formal excellence which he might achieve. For, phonetically Sanskrit is perhaps nearer to perfection than any language shaped by the lips of men, and therefore any one writing in Sanskrit, however mediocre one may be, cannot help pre-

(1) J. H. Steel, *The Elephant*, (Indian Veterinary Manuals), p. xvi.

serving the innate beauty of the medium. In the case of Nilakanṭha however it can truly be said that he writes Sanskrit with that ease and verbal charm for which Sanskrit writers of the South have often been praised. But he has the one serious defect of writing ambiguously on a subject which he cannot expect his readers to be acquainted with beforehand. Besides stray verses here and there I have found the sixth chapter as a whole especially trying.

The botanical names of trees given among the foot notes have all been taken from the Sanskrit-English dictionary of Monier-Williams and most of their Siamese equivalents from Phya Vanpruk Phiebarn's *Index to the Latin names in the List of Common Trees, shrubs etc., in Siam*, (Bangkok, 1923).

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I. THE ORIGIN OF ELEPHANTS.

1. I adore the resplendent Narasimha⁽¹⁾ and Yādava⁽¹⁾ of Rāja-rājamaṅgalam⁽²⁾ who are the flaming fires of destruction to the serried forest-like ranks of demons.

2. After studying the treatise on elephants composed by the great sage⁽³⁾ I make obeisance to the "Elephant-headed God"⁽⁴⁾ and write this "Mātaṅga-līlā"⁽⁵⁾

3. I shall speak briefly on the origin of the elephants, their auspicious and inauspicious marks, signs of longevity, marks of age, size, value, dispositions, degrees of must, their care, daily and seasonal attention, qualifications required in men who are to be put in charge of elephants, etc.

4. There was once a famous king of the Aṅgas⁽⁶⁾ named Romapāda who was like Indra⁽⁷⁾ himself. One day when he was in the town of Campā and was sitting on a bejewelled seat beside the Ganges⁽⁸⁾ surrounded by his courtiers, he was informed of the total destruction of the crops wrought by wild elephants and he was considering what he should do in the matter.

5. At that time Gautama, Nārada, Bhṛgu, Mṛgacarmā, Agniveṇa, Arimeda, Kāpya, Mātaṅgācārya and other great sages called on the king as required by the gods. They were received by the king with all the offerings of hospitality⁽⁹⁾ and they granted him his request (for help) to capture the wild elephants.

(1) When the righteous are greatly oppressed Viṣṇu, the Second Person of the Hindu Trinity, is believed to descend into this world to destroy the unrighteous. Narasimha ("the Man-Lion") and Yādava (better known by the name of Kṛṣṇa, "the Black") are the incarnations which Viṣṇu assumed in two of His descents in the past.

(2) The name of a locality.

(3) Named Pālakāpya.

(4) Vighneśvara, the "God of Obstacles" to whom Hindus first offer worship when commencing an important undertaking.

(5) Mātaṅga": elephant; "Līlā": sportfulness, grace etc. The meaning implied is that the whole life of the elephants is full of sportiveness and grace.

(6) One of the ancient Indian communities.

(7) King of the minor deities of the Hindu pantheon.

(8) One of the great rivers of India.

(9) The original enumerates seat, flowers, water, etc.

6. The king then sent his men to capture the elephants. In their wanderings through the forest the king's men came across Sāmagāyana and his hermitage. Near the hermitage they saw a herd of elephants with the sage Pālakāpya in the middle. They also noticed that he was absent from the herd during the twilights.

7. All this was reported to the king. Thereupon he went out with his men, and while Pālakāpya was away, he captured the elephants, hurried them to Campā and gave them into the charge of Gautama, Nārada and others. The sages had the elephants firmly secured to posts and were keeping watch.

8. (In the meanwhile) Pālakāpya returned to where the elephants used to be. Not finding them there he searched for them everywhere and finally traced them to Campā. He was grieved at seeing their plight and was dressing their wounds and bruises.

9. Gautama and the rest saw Pālakāpya moving silently amidst the elephants and they questioned him why he dressed the wounds of the elephants and showed them such kindness. But he made no answer.

10. When the king heard of it he came out and received the sage with due honours and asked him of what name and family he was. Receiving no reply the king respectfully questioned him again.

11. Then the sage was pleased to speak to the king as follows: "Formerly the elephants could assume any shape at will and they moved about in the sky as well as on the earth. They once alighted on the branch of a Banyan tree which grew to the north of the Himālayas⁽¹⁾ and measured two "yojanas"⁽²⁾ in length and breadth.

12. "Thus they broke the branch. Dīrghatapā, a hermit who lived there, got angry at this and pronounced a curse upon the elephants. Consequently they lost their freedom and have got even to carry men. But the (eight) "Elephants of the Directions"⁽³⁾ were not placed under the curse.

13. "The latter went to Brahmā⁽⁴⁾ and complained that their

(1) The range of mountains forming the northern boundary of India.

(2) Equivalent to eight or nine English miles.

(3) These are the mounts of the deities who guard the eight points of the compass and are named and distributed as follows:—Airāvata (E.), Pundarikā (S. E.), Vāmana (S.), Kumuda (S. W.), Arjuna (W.), Puṣpadanta (N. W.), Sārvabhauma (N.) and Supratika (N. E.).

(4) The First Person of the Hindu Trinity who is the Creator. (The Second and Third Persons are the Preserver and the Destroyer respectively).

descendants which were fated to go down to the earth would suffer from diseases caused by unsuitable food, etc. Brahmā answered them that

14. soon there would be born a kinsman of the elephants, a sage skilled in medicine, and that he would cure them of their ills. Then the "Elephants of the Directions" went back to their respective posts while their descendants came down to the earth in fulfilment of the curse.

15. "Brahmā combined the pleasing qualities of "Yakṣas"⁽¹⁾, "Asuras"⁽²⁾ and gods together and fashioned Rucirā out of that material. As she became very proud she was cursed by Brahmā and was consequently born of Bhārgava (as a mortal). She then came to be called Guṇavati. Once out of curiosity she wandered into the hermitage of Mātāṅga.

16. "Mātāṅga thought she was sent by Indra to disturb his austerities and cursed her to become a cow elephant. Soon he found out that she was innocent and assured her that she would be freed from the curse as soon as she should give birth to a son after drinking the seed of Sāmagāyana.

17. "Once a Yakṣa woman embraced Sāmagāyana in his sleep. So he went outside the hermitage and passed urine. His seed also passed out with the urine. The cow elephant drank it, became pregnant and brought forth a son through her mouth.

18. "She gave the sage his son, discarded the form of elephant and went up to heaven. Sāmagāyana performed the "Jātakarma"⁽³⁾ and other rites for the child and named him "Pālakāpya"⁽⁴⁾ as directed by a heavenly voice.

19. "The child played with elephants and their calves by pools and rivers and streams, roamed with them over pleasant pastures and lived upon fruits and water. Thus he spent a period of 12,000 years and learnt all about the elephants: food that is suitable for them and food that is not, the signs of their health and sickness, and, things that are good for them and things that are not.

(1) Semi-divine beings who attend upon the "God of Wealth" (Kuvera).

(2) The step-brothers and enemies of gods.

(3) "The rite of the new-born".

(4) See XII, 30, for the meaning of this name.

20. "O King of Angas! I am that Pālakāpya, the son of Sānagāyana". The king was astonished by this speech and asked for more information. So the sage spoke again on the origin of the elephants, their marks, their treatment, etc., and said:—

21. "The creation of the elephants was a pious act undertaken for the good of religious rites, the gods, and especially, kings. Therefore the elephants should be well cared for.

22. The "Brahmarṣis"⁽¹⁾ showed to Brahmā the shining egg from which the sun was produced. He lovingly took the two pieces of the egg in his hands and chanted seven "Sāma"⁽²⁾ hymns over them. There upon Airāvata⁽³⁾ came into being and so did the other (seven)⁽⁴⁾ later on, each after a separate recital.

23. The eight bull elephants were born thus from the piece of egg-shell held in the right hand and their mates from the piece held in the left. These elephants had many calves and so too did their calves have calves in due course. They all roamed freely over the earth and in the other worlds.

24. In the war between gods and demons the elephants ridden by Indra, Agni,⁽⁵⁾ and others, took fright and fled to Brahmā. He then created the genius of must, and possessed by that genius the elephants routed the army of demons.

25. The sage, Durvāsā, gave a garland to Indra. (Indra gave it to Airāvata and,) Airāvata trampled upon it. When Durvāsā saw all that he pronounced a curse. Consequently all the possessions of Indra disappeared, and later on when the "Sea of Milk"⁽⁶⁾ was churned for regaining them, Airāvata also came out. So it is said to have been born of that sea.

26. Elephants of the "Bhadra" class were born during the

(1) "Rṣis" or inspired sages of the Brahmin caste.

(2) A portion of the inspired books of the Hindus collectively called the "Veda".

(3) See page 66 note 3.

(4) See page 66 note 3.

(5) The God of Fire.

(6) According to Hindu cosmology the earth consists of seven continents, each surrounded by a sea of a different kind, and of these the continent called Čāka-dvīpa has a sea of milk around it.

"Kṛta" age⁽¹⁾, the "Manda" class during the "Tretā", the "Mrga" class during the "Dvāpara" and the "Mixed" class during the "Kali".

27. The auspicious "Bhadra" was born during the spring of the first age and lived upon the mountains. It had a tall well proportioned body and was rosy in colour. Its eyes and tusks were tawny, its cry was like thunder and it was beloved of the cows. Its humours were well balanced and it had "correct sensitiveness".⁽²⁾

28. The "Manda" was born in the winter of the "Tretā" age and lived both on land and in water. It had bulky limbs, short barrel, short ears, yellow eyes and long curved tusks, and was black in colour. It was phlegmatic, sluggish and lascivious, and had "deep-seated sensitiveness".⁽³⁾

29. The "Mrga" was born in the rainy season of the "Dvāpara" age and lived in the rivers. It had less of length and circumference (than the other two classes of elephants), was lean all over, had large eyes and short tail, and was dusty in colour. It was bilious, voracious, short tempered, fickle, and fierce, and had "superior sensitiveness".⁽⁴⁾

30. By the intermingling of "Manda" and others the "mixed" breed of elephants was produced. They are numerous in the "Kali" age.

31. The elephant is called "Nāga"⁽⁵⁾ because it goes everywhere, "Gaja" because it triumphs and because it roars, "Hastī" because of its origin from the hand of Brahmā, "Vārāṇa" because it wards off the army of the enemy, "Mātaṅga" because it is smeared with road dust, "Kuñjara" because it loosens the earth with its tread, "Padmī" because it is fond of the lotus, and "Dvipa" because it drinks with both its trunk⁽⁶⁾ and mouth.

(1) "Kṛta", "Tretā", "Dvāpara" and "Kali" form a set of four ages of this world which is said to endure for two thousands of such sets before each act of its dissolution and re-creation. They have been happily named the golden age, the silver age, the brass age and the iron age according to the traditional estimate of the righteousness and worth of human beings in each respective age.

(2) See VIII, 22.

(3) See VIII, 21.

(4) See VIII, 20.

(5) Most of these "derivations" are fanciful.

(6) Here and elsewhere in this book "trunk" is used in the sense of proboscis.

32. The elephant is named "Eight-hitter" because it hits with the trunk, the tail, the two tusks and the four feet.

33. It is called "Ibha" because it is afraid of all other animals although it is bigger than any, and because it is lovable.

34. It is called "Kari" and "Danti" because it is distinguished by its trunk and tusks; and it is called "Sindhura" because it sports in the rivers. So much on derivation.

35. The elephant has its tongue turned inwards and has great bodily heat owing to the curse of Agni. Its testicles disappeared and it became fond of sporting with dust, water, and mire, because of the curse (*sic*) of Brahmā. Because of the curse of Dīrghatapā it carries men and serves to decoy the wild elephants. It has lost its divinity and has become fond of its own urine and ordure on account of the curse of Bhṛgu and it sweats inside its body owing to the curse of Varuṇa⁽¹⁾

36. Once Agni became angry with the gods because they were not giving him his share of the offerings and he disappeared. The elephants belonging to the "Lokapālas"⁽²⁾ were sent in search of him. They went to his hermitage and molested his consort. Agni heard her cries but was not able to burn the elephants (since they were protected by the gods). So he cursed them saying:—

37. "Good, you have the insolence to tell me that what all you did you did by the order of Brahmā. Let your tongues remain turned inwards⁽³⁾ and let the inside of your bodies burn always with heat." But Brahmā took pity on them and gave them the amenities of dust,⁽⁴⁾ water and mire.

38. Once the elephants went to the hermitage of Bhṛgu, uprooted the trees that grew in the grounds and voided their dung and urine in the consecrated fires. Bhṛgu grew angry and cursed them to have the habit of smelling their own urine and dung and making (stupid) movements with their jaws.

(1) The God of the Sea and the Waters and Guardian of the West.

(2) The guardian deities who preside over the eight directions, namely, Indra (E), Agni (S. E.), Yama (S.), Nirṛti (S. W.), Varuṇa (W.), Vāyu (N. W.), Kuvera (N.), and Iṣāṇa (N. E.).

(3) "The tip (of the tongue) lies in the groove formed by the lower lip and the organ is possessed of more freedom posteriorly than anteriorly" (Evans, Lt. Col. G. H., *Elephants and their diseases*, p. 84).

(4) The elephants collect dust and throw it on their own heads and backs as a protection against the sun (see Evans, *op. cit.*, p. 32).

39. During the war between gods and demons, Varuṇa noticed that the soldiers of the divine army were running away from the fight as they could not stand the sweat of the elephants and so he made them sweat inwards.⁽¹⁾ Therefore the elephants throw out drops of perspiration through their trunks. Their testicles disappeared⁽²⁾ in accordance with the pronouncement of Brahmā so that they may move about fastly and freely in war, etc.

40. Spring intoxicates all creatures and especially the elephants. Elephants born during the spring are known as "Gandha-dvipas."⁽³⁾ The smell of their sweat, dung, urine, and ichor induce must in all other elephants. These "Gandha-dvipas" bring victory to the king (who owns them).

II. GOOD POINTS.

1. An elephant whose two cephalic knobs, two tusks, neck⁽⁴⁾, and back-bone rise up prominently, is a royal mount.

2. An elephant which is red in seven places, namely, the two tips of the trunk, the male organ, tongue, lip, vent, and palate, is an elephant of the highest class.

3, 4. Worthy of a king is that elephant which has twenty nails on its feet, two massive knobs on the head, a pair of pinkish ears that are not torn at the edges, well formed flanks, two honey-coloured tusks of which the one on the right side curves upwards, a full stomach, and long, straight, tapering, fine-looking tail and trunk; which is dark like the (unripe) areca nut, black, or of the tint of sword steel, and ruddy with "bindu" dots⁽⁵⁾ that are massed in the forms of "Śrīvatsa",⁽⁶⁾ discus⁽⁷⁾, conch-shell and lotus flowers; the posterior part⁽⁸⁾ of whose body rises higher from the shoulders; whose stomach is firm; whose "piṇḍika"⁽⁹⁾ is hanging; and which

(1) "In the elephant the secretion of sweat by the skin is slight", (Evans, *op. cit.*, p. 74).

(2) "They are suspended freely in the abdomen and are situated below the posterior extremities of the kidneys" (Evans, *op. cit.*, p. 90).

(3) "Odoriferous-elephants".

(4) "Āsana": Seat, is the place where the driver sits.

(5) Light coloured spots and blotches on head, trunk, etc., which are, in health, pinkish in colour.

(6) A mole on the breast of Viṣṇu the Second Person of the Hindu Trinity.

(7) "Cakra": wheel, a weapon of offence.

(8) "Jaghana".

(9) "The penis" according to Monier-Williams.

has tall large and very fleshy "kalā".⁽¹⁾

5. The elephants which have massive, long, and rounded necks, are voiced like rain-clouds, have sparrow, or honey, coloured eyes, and have three creases at the shoulder and trunk⁽²⁾ are auspicious.

6. Elephants which have bright eyes, ruddy tips of the trunk, and male organ of the colour of young mango leaves, which are beautiful like the red lotus flower and are sweet voiced, bring good luck to the king (who owns them).

7. Elephants which have the right tusk bent upwards at the tip, which are beautiful with "bindu" dots on their big trunks and faces, whose joints are hidden (under flesh) and whose hind limbs are firm, are fit to be ridden by the king.

8,9. Fit for the king, again, are the elephants whose back-bones are hidden (under flesh) and rise up like a bow, whose hairy cephalic knobs are firm like the swelling breasts of young women, which have large ears, jaws, navels, fore-heads, and genitals, copper-coloured lips, palate and tusks, regular, dense and red "bindu" dots, eighteen or twenty nails, are endowed with strength, vigour, and courage, and smell sweet.

10. In war let the king use such elephants as are valorous, active, skilled in the eight ways of hitting⁽³⁾, courageous, steady, fast, disposed to kill, and endowed with good points, and not them that are broken down, thirsty, or very young.

11. Soldiers can only fight and horses can only carry (the fighting men). But the elephants of the king can fight as well as carry.

12. Gait like the gait of deer, lion, parrot, monkey, wrestler, swan, "Kādambaka"-swan, Gandharva⁽⁴⁾, Kinnara⁽⁵⁾, Garuḍa⁽⁶⁾, bear, tiger, "Çarabha"⁽⁷⁾, snake, or "Cakravāka" bird⁽⁸⁾ is auspicious,

(1) The original reads "Kalā" which, as found explained in medical books like the "Bhāvaprakāṣa", does not seem to suit the context. Therefore it is probably the same word as "Kālā" in VI, 11, here altered to suit the metre. See page 80, note 5.

(2) "Kara", (lit. hand), may also be translated as "fore-leg."

(3) See I, 32.

(4) The musicians of the gods.

(5) Semi-divine beings with human bodies and heads of horses.

(6) Semi-divine beings who are partly men and partly vultures in form.

(7) Mythical eight-legged animals often represented as lions, with heads of elephants.

(8) *Anas casarca*.

13. The cry produced at the root of the tongue is called "Phenāyita" ("foaming"), that produced with the lips and the palate is "Potāyita" ("calf-like"), that produced at the throat is "Garjita" ("roar") and that produced with trunk and cheek is "Hasita" ("laughter"). All these are auspicious. But the cry which is due to hunger, thirst, or fear is inauspicious.

14. Of the cries of the *elephants only six are considered auspicious, namely, those which are deep, soft, joyous, healthy, amorous, and pleasant.

15. An elephant which produces the sound of "Mrdaṅga"⁽¹⁾ with its trunk, of "Dundubhi"⁽¹⁾ with its ears, and of clouds with its mouth is worthy of honour.

16. The elephants whose cries resemble those of swans, cranes, pea-fowl, cuckoos, tigers, lions, or bulls are also worthy of honour; but not those whose cries are like those of camels, crows, hogs, or monkeys.

17. Even elephants that are endowed with all the good points bring evil if they should have more than the usual number of nails or less; and conversely, even elephants which have no good points are auspicious if they only have the normal number of nails.

III. BAD POINTS.

1. An elephant which has more nails (than what is usual) or less, visible testicles, short trunk tips, trunk tips that hang down loosely, short stature, belly shaped like that of a frog, or dark brown palate; or which is bulky, thin like a leech, unsymmetrical at the flanks, rough (to the touch), or devoid of must, is not worthy of consideration.

2. An elephant whose tusks are fissured, knotted, very rough, variegated, or very stout, which has thinnish, unequal, and whitish "bindu" dots, short stature, veins showing all over the body, thin penis, bent, stout, bruised, rough, and short tail, or which is slight at the root of the tail, "Kāla",⁽²⁾ and back, is unacceptable.

3. The king who owns an elephant which has visible testicles will be assassinated by his son or friend.

4. The elephant which has not got the right ear brings ruin to

(1) Different kinds of drums.

(2) See page 80, note 5.

all the four castes⁽¹⁾ and that which has not got the left brings death to artists and artisans or makes the king ill.

5. An elephant which has got white spots on the skin, tusks, palate, nails, etc., should either be abandoned altogether or have the affected part cauterised and scraped and (the wound) dressed, and propitiatory rites should be performed for averting the evil (consequent upon the possession of the animal).

6. An elephant which roams about at night, and during the day makes soft cries, lashes its tail and draws its body up in its longing to soar up with the birds, and is uncontrollable, is a "Vyāla"⁽²⁾ elephant. It is unacceptable even if it should have all the good points.

7. If a cow that is with calf or is accompanied by its calf is caught, it will cause destruction to the vehicles and the treasury. It must be led back to its forest or to a forest that is inhabited by hermits, and worship shall be offered to the elephants and deities of the directions.⁽³⁾

IV. SIGNS OF LONGEVITY.

1. Elephants which have shining tusks, nails, hair, and eyes, long ears, tails and back-bones, well-developed fore-limbs, and cephalic knobs of equal size, will live long.

2. Elephants whose bodies are red in seven places⁽⁴⁾ and rise up prominently at six⁽⁵⁾, and elephants which are courageous and sweet-smelling, look like dark clouds, are vociferous, and have two or three hairs from each follicle, will also live long.

3. The twelve items, namely, the barrel, head, eyes, face, ears, neck, chest, tusks, trunk, disposition, gloss, and hind limbs, represent each a period of ten years in the life of an elephant.

4. Brhaspati⁽⁶⁾ has said that the number of items that are fully developed in an elephant is equal to the number of decades which that elephant will live.

5. I⁽⁷⁾ am however of opinion that an elephant will live long even

(1) The priests, warriors, agriculturists, and serfs.

(2) Wicked; vicious elephant; tiger, etc.

(3) See page 66, note 3 and page 70, note 2.

(4) See II, 2.

(5) See II, 1.

(6) The reference is to a treatise on elephants attributed to Brhaspati the preceptor of the gods, but, it seems, not extant.

(7) "I" here refers to "Pālakāpya".

if it has only the first three, the fifth, seventh, and eighth of these items well developed.

6. The fourth, the eighth, and the twelfth decades form the ultimate limits of the lives of the Mrga, Manda, and Bhadra classes of elephants respectively.

V. THE SIGNS OF AGE.

1. An elephant is considered young from the twelfth year of its life, middle-aged from the twenty fourth, and old from the sixtieth.

2. It is called "Bāla" during the first year. It is then soft, copper-coloured, soft-haired, and sleepy, has a small sprout of a trunk and an undefined shape, and is fond of mother's milk.

3. It is called "Pucchaka" during the second year. Then its nails are a little firmer than before, and its tongue, lips, etc. are very red. It drinks very little milk but tries to eat a bit of grass, creepers, etc. The hidden parts of its body are red. It gambols with joy. It has whitish and partly closed eyes that gaze down, and it is charming to the eye.

4. It is called "Upasarpa" during the third year. It has well-defined nails, middle of the head⁽¹⁾, joints, ears, and fleshy covering (of the roots) of the tusks⁽²⁾. It has "bindu" dots on the lobes of the ears. It is hairy at the ears and the head. It carries its head high. Its teeth are firmer⁽³⁾ and it eats grass.

5. It is called "Barbara" during the fourth year. It is red at the sides of the base of the frontals⁽⁴⁾, the portion of the body below the back and the sides⁽⁵⁾. It dislikes (mother's) milk and is fond of grass. The portions of its body between the shoulders⁽⁶⁾ and

(1) "Vidu". See VI, 7.

(2) "Danta-praveṣṭa".

(3) In the whole of this chapter there is much confusion between "the teeth" and "the tusks" and therefore the use of one expression or the other in the translation is only tentative. Again, the statements that the teeth of the elephant are shaky or firm at this age or that seems to be incorrect as, according to most of the modern writers on the subject, the teeth of the elephant do not fall out but are gradually replaced by a new set when the old is worn out. A difference of opinion on this point is quoted in note 2, page 78, at the end of this chapter.

(4) "Vilāga". See VI, 8.

(5) "Niṣkoṣa". See VI, 12.

(6) "Proha". See VI, 10.

above the waist⁽¹⁾ become firmer. It grows bigger, its palate becomes black at the edges and its tusks⁽²⁾ begin to grow.

6. It is called "Kalabha" when it is five years old. It nibbles the bark of trees, has scanty hair, is fond of muddy water and dust, has brief erections,⁽³⁾ knows anger, and recognises pain and pleasure. It also recognises the voice and signals of the driver and shows "superior sensitiveness".⁽⁴⁾ Its forehead⁽⁵⁾ and tusks are shiny.

7. It is called "Naukārika" when it is six years old. It is beautiful with thick "bindu" dots on the flaps of the ears, temples, corners of the mouth⁽⁶⁾ and of the eyes, "Vilaga"⁽⁷⁾ and "Pratimāna".⁽⁸⁾ There are no creases upon its body.

8. It is called "Çiçu" when seven years old. Its nails, "Proha",⁽⁹⁾ "Sandāna",⁽¹⁰⁾ "Cikā",⁽¹¹⁾ "Pali",⁽¹²⁾ trunk, and head are massive. It gnaws its teeth. It has itching. Its feet, speed, and "Avaskāra"⁽¹³⁾ are conspicuous, and the tips of its trunk are beautiful.⁽¹⁴⁾

9. It is called "Majjana" when it is eight years old. The roots of its nails become massive, its wounds heal quickly, its teeth are shaky, and it feeds on tender grass. It is always restless, rubs its body (against rocks or trees to allay itching), has longer erections, and is soft in striking.

10. It is called "Dantārūpa" when nine years-old. It has bright eyes. It mounts the cows but has no orgasm. It has a pleasing

(1) "Sandāna", See VI, 11.

(2) "Daçana", literally "teeth".

(3) "Hṛṣyati".

(4) See VIII, 20.

(5) "Avagraha" See VI, 7.

(6) "Śrīkka".

(7) See VI, 8.

(8) See VI, 8.

(9) See VI, 10.

(10) See VI, 11.

(11) See VI, 11.

(12) See VI, 10.

(13) See VI, 10.

(14) "Snigdha" may also be translated as "viscous", "smooth", "unctuous" or "glossy".

colour, long tusks and expansive chest. The vulnerable parts and the joints of its body become strong, and it hits hard.

11. It is called "Vikka" when ten years old, and it is the pride of the herd. It is steady in coitus and has orgasms. Its teeth (or tusks) are firm, it has great strength and energy and it enjoys itself.

12. It is called "Pota" when it is twenty years old. It has full rumps and "Avaskāra"⁽¹⁾ and round ears and looks handsome with its well-formed limbs. It has creases at the "Proha"⁽²⁾ etc. and has yellowish tusks. It is energetic, passionate, strong, conquering, and capable of fecundation. It is subject to troubles (from rival bulls) and keeps to places which are difficult to reach.

13. It is called "Javana" when it is in its third decade. It has well proportioned limbs and begins to smell of ichor. It has all the characteristics (of the genus fully developed). It is steady in fight, has glossy hair and sleepy eyes, noticeably grows bigger, is handsome, intelligent, choleric and murderous. Its humours are balanced.

14. It is called "Vāraṇa-Yuvā" when it is in its fourth decade. It has permanent creases at the "Sandāna"⁽³⁾, etc. It becomes subject to must. It sleeps very little out of fear of rivals. Roaring and with hair standing on the ends it rushes to battle even with fire mistaking the smoke for a rival elephant.

15. It is called "Yaudha" when it is in its fifth decade. The creases of its skin at the "Sandāna",⁽³⁾ ears, temples and knees are unctuous with ichor. It becomes excited without cause (i. e. when there is no cow nearby) and it attains to its inborn pre-eminence.

16. When an elephant has reached its sixtieth year⁽⁴⁾ the folds of its skin become cracked, and its organs of sense and digestive powers become a little impaired. It has hair on the fleshy covering of the root of the tusks⁽⁵⁾, lips, ears, etc. and the roots of its tusks are visible.

(1) See VI, 10.

(2) See VI, 10.

(3) See chapter VI, verse 11.

(4) It is interesting to note that in Buddhist literature, the Buddha in the height of his greatness is compared to an elephant which is sixty years old thus implying that an elephant at that age does not yet begin to deteriorate.

(5) "Veṣṭa".

17. An elephant in its seventh decade has weak digestion. It has less of bile⁽¹⁾ and more of wind⁽¹⁾ and too much of phlegm⁽¹⁾. Its limbs are stiff and its skin is rough and colourless.

18. When it is in its eighth decade its eyes are watery, mucus flows out of its temples and its skin is discoloured and very rough. It keeps outside the herd for fear (of the younger bulls). It is devoid of sexual appetite and is impotent. Its tusks (or teeth) stop to grow and its wounds do not heal quickly. It keeps its eyes closed. At last even its skin and hair perish.

19. "Purāṇa", i.e. an elephant in its ninth decade, has a drooping neck and shaky teeth. Its limbs are loose and move slowly, its teeth fall out and it feeds on tender grass. It feels no pride and nourishes no enmity. Its rough skin creases all over. It sleeps much and walks behind the herd.

20. An elephant in its tenth decade is called "Vṛddha". Its ears, shoulders, tail and trunk hang loosely; its hair perishes, its teeth are shaky, its flesh and strength fade away, its feet slip, it eats little, its limbs are parched up, its eyes are filmy, its blood-vessels show out, it voids dung and urine with great difficulty, its nails are damaged by worms and it is always thirsty.

21. When it is a hundred and ten years old the elephant lays itself down in the shade of trees but does not take to water. Its ordure is coated with mucus. It passes very little urine. It has no teeth⁽²⁾ and it subsists on soft fodder. It is always sickly.

22. Its trunk, ears and tail hang loosely. Its limbs are stiff and it gropes its way about. It falls "asleep"⁽³⁾ when it has reached (the end of) the twelfth decade.

(1) A study of the ancient treatise on medicine attributed to Ājurveda leads one to conclude that "bile" "wind" and "phlegm" mean disorders of the blood and the apparatus for the production of animal heat, disorders of the nerves, and disorders of the glandular bodies respectively. The identification of "wind" with "disorders of the nerves" is the most easily apparent since the diseases attributed to "wind" by Ājurveda are all diseases of the nerves.

(2) "Vāg-viṣāṇa" literally "the horns of the mouth" i.e. the tusks. The translation above is hazarded on the ground that while no modern writer clearly says that the tusks fall off or are worn out when the animal gets old, Gilchrist, (as quoted in *The Elephant* by J. H. Steel, p. xxix), asserts that when the elephant is about eighty years of age its "eye teeth" drop out, and in extreme old age the molar teeth are worn level with the gum.

(3) i. e. dies.

23. Thus after living a hundred and twenty years and doing many deeds, the elephant goes to heaven.

VI. SIZE.

1. An elephant is measured from the eyes to the root of the tail for length, from the nails to the shoulders for height, and near the arm-pits⁽¹⁾ for circumference.

2. At birth an elephant of the "Mṛga" class measures a cubit and a half long, one cubit high, and two cubits around. These measurements increase at the rate of five "aṅgulas"⁽²⁾ a year up to the tenth year of its life.

3. When full-grown it is five cubits high, seven long and eight around. The "Manda" and "Bhadra" elephants attain to these dimensions in the tenth and the thirteenth years of their lives respectively.⁽³⁾

4. First, second, and third class of cows measure six, five, and four (cubits) high; eight, seven, and six long; and nine, eight, and seven around.

5. Elephants which are very stout or very lean or have defective limbs are not to be measured.

6. It is desirable to measure an elephant which has well-proportioned limbs, and especially one which has auspicious marks.

7. KUMBHAS are the two protuberances on the head and VIDU is the place between them. AVAGRAHA is the place below "Vidu" and VAHITTHAS are the bases of the "Kumbhas."

8. PRATIMĀNAS are below the "Vahitthas". The place between the "Pratimānas" is called VĀYU-KUMBHA. The two sides of the "Vahitthas" are called VILĀGAS.

9. GAṆḌŪṢA is the part above PUṢKARA. ĪSIKĀ is the frame of the eye, and NIRYĀNA is its outer corner. CULIKĀ is the root of the ear.

(1) "Kakṣyā-sthāna".

(2) "Aṅgula"—a finger's breadth; 12 "aṅgulas" make a "vitasti" (span) and 24 make a "hasta" (cubit).

(3) The original is not clear. Besides, it incorrectly says the dimensions of the full-grown "Mṛga" are five *spans* ("vitasti") in height, seven in length, and eight in circumference. The translation above is based on "Hastyāyurveda" (IV, ii, 16-17) which the author of the original professes to have summarised.

10. PICCHŪṢA is the flap of the ear. PROHA is the space between the shoulders. AVASKĀRA is the place above the trunk. PALI is the part above "Avaskāra".

11. NIGALA-STHĀNA⁽¹⁾ is the middle of the body and CIKKĀ is the place beyond it. SANDĀNA⁽²⁾ is the part above⁽³⁾ the rumps⁽⁴⁾ and KĀLA⁽⁵⁾ is the part below.

12. The two APARAS are the parts below the sides⁽⁶⁾. NIṢKOṢA⁽⁷⁾ is the part below the sides and the back. Behind them is the KUKṢI⁽⁸⁾⁽⁹⁾

13. PECAKA is the part near the root of the tail. ANTAR-MANĪ is situated in the chest at the joint of the neck.

VII. VALUE.

1. An outsider cannot assert that an elephant is worth only so much. For, the valuation which is acceptable to both buyer and seller is the best, what is acceptable to one of them alone is middling, and what is acceptable to neither is worthless. Therefore, after taking all this into consideration, the price of elephants should be carefully determined by a number of experienced men.

2. One may pay the full price (asked) for a first class elephant which has all the good points, and, one half for an elephant which has a blind eye, a maimed leg, or a broken tusk, or is deaf or sickly, one third for an elephant which lacks half of its tail, ear, etc., and one fourth for an elephant which has lost both its tusks etc., if (the last three) should otherwise be very good animals.

(1) Lit. "near (or below) the neck" i. e. the part between the forelegs and the shoulders?

(2) Obviously the hip-joint. But Monier-Williams translates "Sandāna" as the part under the knee where the fetter is fastened.

(3) "ūrdhvam".

(4) "jaghana".

(5) Since the author of the original uses Dravidian words and turns of expression in some places, it is probable that the word "Kāla" here is the Sanskritised form of the Dravidian "Kāl", a leg.

(6) "pakṣa".

(7) Lit. bulge or protuberance.

(8) Stomach.

(9) Here the text is corrupt and untranslatable.

3. The elephant whose left tusk rises higher than the right is called "Apākila". It loses an eighth of its value (on account of this defect). A cow fetches only two thirds the price (of a tusk).

VIII. DISPOSITIONS.

1. One should determine whether an elephant partakes of the nature of a god, demon, Gandharva⁽¹⁾, Yakṣa, Rākṣasa⁽¹⁾, man, ghost, or snake, by observing the respective characteristics.

2. An elephant which partakes of the nature of a god is lovely, smells like water lily, sandal wood, "Sapta-parṇa"⁽²⁾, citron, lotus, or "Caturāṅgula"⁽³⁾, looks happy, is sportful like a calf, and has the voice of a cuckoo.

3. An elephant which partakes of the nature of a demon is vicious, inordinately fond of fighting, mean, merciless, and murderous, and smells like "Sindhuvāra"⁽⁴⁾, aloe wood, or fish.

4. An elephant which partakes of the nature of a Gandharva smells like "Atimukta"⁽⁵⁾, "Yūtika"⁽⁵⁾, lotus, "Punnāga"⁽⁶⁾ or yellow sandal wood, is fond of music, has a graceful gait, beautiful tusks, eyes, cephalic knobs, trunk and trunk-tips, and has very few "bindu" dots.

5. An elephant which partakes of the nature of a Yakṣa is clean, unforgiving, pleasing to the eye, and vigorous, and has uplifted ears.

6. An elephant which partakes of the nature of a malevolent Rākṣasa smells foul like a crow, monkey, ass, camel, cat, urine, or faeces, kills other elephants, is ferocious at night, is fond of sour food, flesh and blood, is disobedient and ungrateful.

7. An elephant which partakes of the nature of a ghost is fond

(1) "Gandharvas" and "Rākṣasas" are semi-divine beings of Hindu mythology. The former are the heavenly musicians and the latter are a kind of ogres.

(2) *Alstonia scholaris* (ต้นแปด. ล.)

(3) *Cathartocarpus fistula*.

(4) *Vitex negundo*.

(5) Two kinds of jessamine.

(6) *Rottelaria tinctoria* or *Calophyllum inophyllum* (ปะทิว).

of deserted places, smells like a corpse or sheep, is mad⁽¹⁾ at night, has a loud voice, and is very choleric on the "Parva"⁽²⁾ days.

8. An elephant which partakes of the nature of a snake⁽³⁾, smells like fish, "Çaivala"⁽⁴⁾, "Phañirjaka"⁽⁵⁾, mire, toddy, or meat, is afraid of thunder, is ferocious at night and is fond of water and dust (more than other elephants).

9. A "Brahmin"⁽⁶⁾ elephant is clean, smells like honey, milk, "Paramāṇṇa"⁽⁷⁾, melted butter, or mango blossoms, is friendly and well disposed towards other elephants, is calm, is fond of the bath, and has a kindly disposition.

10. A "Kṣatriya"⁽⁸⁾ elephant smells like sandal wood, melted butter, yellow orpiment, red arsenic, or "Guggulu"⁽⁹⁾ is skilful in the use of weapons, is fearless in war and valiant in the midst of a rain of missiles.

11. A "Vaiçya"⁽¹⁰⁾ elephant smells at its mouth like "Bādhūka"⁽¹¹⁾, rice, "Ketaka"⁽¹²⁾, or "Mālati"⁽¹³⁾ has endurance, feeds on flesh, is fond of being cajoled, and its anger is easily pacified.

12. A "Çūdra"⁽¹⁴⁾ elephant is satisfied with the remnants of others' food, is timid, smells like oysters, tamarind, hide or bones, is

(1) "Bhrāntaḥ". The translation above is based on the sense in which it is used in Tamil and Malayalam languages of South India.

(2) The eighth and the fourteenth days of the fortnight together with the new and the full moon days.

(3) "Bhujaṅga".

(4) *Blyxa octandra*.

(5) A species of basil.

(6) See note 10, below.

(7) A kind of porridge made of rice, milk and sugar.

(8) See note 10, below.

(9) Bdellium or the exudation of *Amyris agallochum* (a fragrant gum resin used as a perfume and medicament).

(10) The words "Brahmin", "Kṣatriya", "Vaiçya", and "Çūdra" occurring in verses 9-12 refer, respectively, to the priestly, warrior, cultivator, and servile castes into which the Hindu society is divided.

(11) *Pentapetes phoenicia* (ပဲခူးသီး) or *Terminalia tomentosa* (ပဲခူးသီး).

(12) *Pandanus odoratissimus* (သံချပ်).

(13) A kind of jessamine (*Jasminum grandiflorum*).

(14) See note 10 above.

irascible, mean, and ungrateful.

13. A Serpent⁽¹⁾ elephant is treacherous and cruel, walks crookedly, is proud, and eats very little.

14. The elephants which partake of the nature of gods, Kṣatriyas, Gandharvas, and Brahmins are "Satvic",⁽²⁾ those which partake of the nature of Vaiçyas and Çūdras are "Rajasic", and the rest are "Tamasic"

15. The colours of the elephants which are four, namely, green, yellow, black, and white, resembling the colour of the pea-cock's tail, gold, rain-cloud and lightning, have been produced by (a predominance in their constitution of) a mixture of blood and bile, of blood and phlegm, of bile alone, and, of blood alone respectively. Only elephants of black colour are found on the earth, and the rest are in heaven.

16. The lustre⁽³⁾ of the elephant is of five kinds and these obscure (the real colour of the) elephant as the clouds obscure the sun. The first, the colour of the cloud, originated from the earth-element and the second, the colour of gold, from the fire-element. These three (*sic*) lustres are most acceptable and the rest are graceless and censurable.

17. The Gandharva, Nāga, Yakṣa, and Kṣatriya elephants are warlike and are to be used in war, the god and Brahmin elephants in religious ceremonies, the Vaiçya elephants in all kinds of work, and the rest in war, killing, carrying goods, executing thieves, destroying tigers, etc.

18. The sensitiveness of elephants is of seven kinds, namely, 1. "acute", 2. "superior",⁽⁴⁾ 3. "deep-seated", 4. "correct", 5. "perverse", 6. "gross", and 7. "mature".

19. An elephant which has "acute" sensitiveness shrinks from whip,⁽⁵⁾ goad, and stick, and is pained extremely by their touch.

(1) "Sarpa".

(2) The qualities of "Satva" (light), "Rajas" (activity), and "Tamas" (darkness) are believed to enter into the composition of all living creatures, in various proportions, and to determine the nature of those creatures as "Satvic", "Rajasic" or "Tamasic" according to the predominance of one or another of those qualities.

(3) "Chāyā". The whole of this verse is corrupt and difficult to understand.

(4) "Superior" as opposed to "deep-seated".

(5) "Prājana" can also mean goad.

20. An elephant which has "superior" sensitiveness feels the sharpness of the goad even when it merely touches the skin or even the hair.

21. An elephant which has "deep-seated" sensitiveness does not feel the goad even when it has pierced the skin and digs into the flesh and the blood is flowing.

22. An elephant which has "correct" sensitiveness understands (the signals for) stopping and going and is neither terror-struck nor confounded (when the goad is used to convey the signals).

23. An elephant which has "perverse" sensitiveness backs when it is urged forward, stops when caught (by the lead and led) and acts contrary to the signals.

24. An elephant which has "gross" sensitiveness is extremely perverse: it acts contrary to the signals all unconsciously.

25. An elephant which has "mature" sensitiveness is refined in every way, faultless, and best.

IX. MUST.

1. The elephants become happy by enjoying sweet things: food, water, tender grass and fodder, drinks of various kinds, fragrant unguents, kind words, access to dust and water, and freedom of movement.

2. When the elephant is happy the constituents⁽¹⁾ of its body increase. Therefore the bull should be allowed to roam with the cow and freely sport in water.

3. The humours of the elephant become harmonised while it sports in the tank full of lotuses, eating the lotus stalks and filling the trunk with the fragrant water, and as it moves about freely and eats what it likes.

4. The elephant gets in rut owing to excess of happiness and it ceases to be in rut when devoid of happiness.

5. The ichor flows out through many ways: eyes, palate, temples, ears, navel, the sexual organs, trunk, breasts, and hair.

6. Excitement, alertness, pride, (distinctive) gait and smell, anger, strength and courage are the eight characteristics of an elephant in rut.

(1) "Dhātu". These are seven, namely, "Rasa" (chyle, lymph?), blood, flesh, fat, bone, marrow, and semen.

7. When of old Brahmā created passion, He placed a half of it in the elephant and the other half in the rest of the creation. So, under influence of passion, the elephants get enraged and fight when offended.

8. At the sight of this passion the trees put on their vernal growth and the other living things become exhilarated by the mere remembrance of their ardour.

9. If an elephant should get in rut in a kingdom or city the land will be fruitful. If the ichor should flow first from the right temple the king will be victorious, and if from the left, the driver; should it flow first from the testicles there will be good rainfall, and should the ichor flow all at once from the temples as well as the testicles the king will achieve glory.

10. Should an elephant lift its head up, trample down (impediments like) ant hills, tree-stumps and bushes and walk up to its companion with joy in its eyes, or should it often trumpet and spray (its saliva) when being harnessed, it is then getting in rut and will bring victory.

11, 12. Then "Kaṭapūrṇa"⁽¹⁾, (the elephant in the first degree of must,) envelopes its right tusk (in the coils of its trunk) and walks weakly with unsteady steps. Again, it plants its trunk upon the ground and sighs, and closing its eyes, becomes dreamy and inactive. It eats voraciously and urinates often. Its skin is blue like the clouds, its nails, tusks and eyes are of the colour of honey, the corners of its eyes are red and its "bindu" spots look like the filaments of the lotus. It hates other elephants when they throw dust and water at it in play.

13. "Ārdra-Kapolita"⁽²⁾, (the elephant in the second degree of must), bathes its cheeks with a copious flow of ichor. It thunders like the cloud of the day of dissolution of the world, and rushes to kill even them that are far away.

14. "Anibandha"⁽³⁾, (the elephant in the third degree of must), looks around constantly and sheds ichor from its male organ drop by drop. Then, desiring to get away, it roars and hates the tethering post.

(1) "Full-temples".

(2) "Wet-cheeks".

(3) "Tetherless".

15. When it has reached the state of "Gandha-cara" ⁽¹⁾ (the fourth degree of must,) it emits an odour like that of "Saptacchada" ⁽²⁾ or lotus, sheds ichor of vermilion ⁽³⁾ colour, is always angry, and stays apart from elephants, chariots, and horses.

16. When it has reached the state of "Krodhani" ⁽⁴⁾ (the fifth degree of must,) it refuses food and drink. During the night it hides itself in the shadows and is uncontrollable. It becomes very choleric and destroys the elephants, horses, and foot soldiers within its reach.

17. When the must has reached the climax ⁽⁵⁾ the elephant wishes to destroy the whole creation, and becomes restless. It cannot bear (to hear the sound of) bells (tied to the neck) of other elephants, and hates even its own shadow.

18. When the state of must is past the elephant looks like a spent cloud: it has no ichor, speed or anger. It walks about gently and has no enmity for other elephants.

19. The elephant becomes greatly weakened by the loss of ichor and therefore it quickly succumbs to many serious diseases and may even be deprived of must in the succeeding years ⁽⁶⁾. Hence the evil effects of must should be remedied within three months.

20. "Sahā" ⁽⁷⁾, "Amṛtā" ⁽⁸⁾, "Çigrū" ⁽⁹⁾, "Balā" ⁽¹⁰⁾, "Dvimūrvā" ⁽¹¹⁾,

(1) Odoriferous".

(2) *Alstonia scholaris* (தீநீர் பூ. ள).

(3) "Kunkuma". In Sanskrit this means "Saffron", but in some South Indian languages, a vermilion coloured powder.

(4) "Choleric".

(5) "atikrāntāvasthaḥ". In the Hastyāyurveda, p. 693, this state is called "ativāhīni".

(6) Lt. Col. G. H. Evans also considers this to be bad (*Elephants and their diseases*, p. 176).

(7) *Aloe perfoliata*, or *Unguis odoratus*.

(8) *Embllica officinalis*, *Terminalia citrina* Roxb., *Cocculus cordifolius*, *Piper longum*, or *Ocimum sanctum*.

(9) *Moringa pterygosperma* (மரீச்சி).

(10) *Sida cordifolia*.

(11) Probably means "the two Mūrvās". "Mūrvā" is *Sansevieria roxburghiana*.

“Kapittha”⁽¹⁾, “Saptacchada”⁽²⁾, sandal wood, “Kadamba”⁽³⁾, “Guñjā”⁽⁴⁾, “Madhuka”⁽⁵⁾, “Açva-gandhā”⁽⁶⁾, “Jīvantikā”⁽⁷⁾, “Çālmali”⁽⁸⁾, and “Sūraṇa”⁽⁹⁾;

21. (Or) “Vṛçcīra”⁽¹⁰⁾, “Sevyā”⁽¹¹⁾, “Ikṣura”⁽¹²⁾, “Kukkuṭāṇḍa”⁽¹³⁾, “Guñjā”⁽⁴⁾, “Açva-gandhā”⁽⁶⁾, “Aguru”⁽¹⁴⁾, and “Gokṣura”⁽¹⁵⁾, compounded with cocoanut-milk and honey and made into balls should be administered to elephants when they are just getting in rut.

22. Roots of “Koraṇḍa”, jasmine, “Nimba”⁽¹⁶⁾, and “Tilva”⁽¹⁷⁾, Salt, and “Inguda”⁽¹⁸⁾ compounded with honey and made into balls, should be administered in order to increase the irascibility (of an elephant in rut).

(1) *Feronia elephantum* (มะขวิด).

(2) *Alstonia scholaris* (ตีนเป็ด).

(3) *Nauclea cadamba*, white mustard, *Andropogon serratus*, turmeric, or a particular mineral substance.

(4) *Abrus precatorius* (มะกอก).

(5) *Bassia latifolia* or *Jonesia asoka*, *Parra jacana* or *goensis*, or *liquorice*.

(6) *Physalis flexuosa*.

(7) A parasitical plant, a kind of pot-herb, *Cocculus cordifolius*.

(8) *Bombax heptophyllum* or *Salmalica malabarica* (จัน).

(9) *Amorphophallus campanulatus* (the Telinga potato).

(10) A *Punarnavā* with white flowers. (“*Punarnavā*” is hog-weed or *Boerhaiva procumbens*).

(11) *Ficus religiosa* (โผล่), *Barringtonia achutangula* (จิก), a sparrow, an intoxicating drink made from the blossoms of the *Bassia latifolia* the parasitical plant *Vandā*, *Emblie Myroblam*, the root of *Andropogon muricatus* red sandal-wood, sea salt, the thick middle part of curds, or water.

(12) *Capparis spinosa*, *Asteracantha longifolia*, or *Saccharum spontaneum* (หญ้าหนวด).

(13) A fowl's egg; or a species of rice.

(14) *Aquilaria agallocha*.

(15) *Tribulus lanuginosus*; or a cow's hoof.

(16) *Azadirachta indica* (สะเดา).

(17) *Symplocos racemosa*, or *Terminalia catappa* (ทุเรียน).

(18) *Terminalia catappa* (ทุเรียน).

23. The paste of "Mātuluṅga",⁽¹⁾ "Suvaḥā",⁽²⁾ "Sahā",⁽³⁾ "Kaṇā",⁽⁴⁾ "Sapta-parṇa",⁽⁵⁾ "Vijayā",⁽⁶⁾ "Ingudī",⁽⁷⁾ honey and milk, smeared over the body,⁽⁸⁾ will bring the elephant in rut under control.

X. CAPTURE OF ELEPHANTS.

1. Trapping,⁽⁹⁾ decoying with the help of cows, running down, felling together, and pit-fall are the five ways of catching elephants. Of these each succeeding method is more censurable than that preceding. Since the last two are (often) destructive, they, and especially the fifth, ought not to be practised.

2. The trap⁽¹⁰⁾ measures about two miles⁽¹¹⁾ in length and breadth. It is hedged with logs and surrounded with an impassable moat. Leading out from the entrance there is a road which gradually increases in width and is fenced on both sides.

3. The door is drawn up and fastened above. Inside the enclosure a number of stakes are driven into the ground and tethers are fastened to them. Then sugar-canes, etc. are laid (at the outer end of the pathway) and the elephants (that may have been enticed by the bait) are frightened with the sound of drums and driven into the enclosure, (and the door is let down) quickly by cutting the ropes (which keep it fastened above).

(1) Citron.

(2) Name of various plants (*Vitex negundo*; *Cissus pedata*; *Boswellia thurifera*, etc.).

(3) See page 86, note 7.

(4) Long pepper; Cummin seed; a kind of fly.

(5) See page 87, note 2.

(6) Name of various plants: *Terminalia chebula* (สมอไทย); *Sesbania aegyptica* (สนับ); *Vitex negundo*; *Rubia manjista*; *Fremna spinosa*; a kind of hemp; a kind of Camī (Camī: *Prosopis spicigera* or *Mimosa sumā*); *Acorus colamus*, (กะลัมจีน วนน้ำ ขางคาน้ำ ล).

(7) *Terminalia catappa* (ทุรว).

(8) It is not clear whether it is the body of the elephant or of the driver that is to be smeared with the preparation.

(9) "Vārī-karma".

(10) "Vārī".

(11) One "Kroṣa".

4. After two or three days mahouts enter the enclosure armed with spears, etc. They skilfully tether the selected animals to the stakes and drive the rest out.

5. The mahouts then secure (each newly caught elephant) with soft but tenacious ropes at the neck, behind the forelegs and the hind part of the body, and with fetters on hind legs, and with long ropes fastened to the front, they drag it (forward) slowly, reducing, in the meanwhile, the pull on the ropes behind.

6. Thus, with the help of tame elephants, they slowly drag the wild ones from stake to stake and get them into the stables.

7. The hunters fasten hides under the stomachs of five or six trained cow elephants and conceal themselves within those hides equipped with ropes etc. They then direct the cows into the herd (of wild elephants), and deftly secure the bulls. This is capture by decoying with the help of cows⁽¹⁾.

8. The cow which has been bathed with cold water in which "Varā"⁽²⁾, "Aguru"⁽³⁾, bark of "milk-trees"⁽⁴⁾, great cardamoms⁽⁵⁾, black sandal-wood⁽⁶⁾, "Sevya"⁽⁷⁾ and "Lodhra"⁽⁸⁾ had been kept soaked, entices the bulls.

9. A paste of honey, "Uçīra"⁽⁹⁾, "Natā"⁽¹⁰⁾, and toddy or the

(1) "Vṇṣā-lobbhana".

(2) The three kinds of myrobalan (*Terminalis chebula* สมอไทย, *Terminalia bellerica* สมอทมิฬ, and *Phyllanthus emblica* มะขามป้อม), *Clypea hernandiifolia*; *Asparagus racemosus* (สาบลิ้น); *Cocculus cordifolius*; turmeric; *Embelia ribes*; a root similar to ginger; Brāhmī (a kind of fish, *Macrogynathus pancalus*; a kind of vegetable; *Clerodendrum siphonantus*, เพี้ยยาบม่อม); Reṇukā (*Piper aurantiacum*; *Oldenlandia herbacea*).

(3) *Aquilaria agallocha*.

(4) Literally trees which exude a milky juice. But V. S. Apte's Sanskrit dictionary restricts the term to four of them viz. banyan, fig, *Ficus Religiosa* (โพธิ์), and *Bassia latifolia*.

(5) "Māleya".

(6) "Kāleyaka".

(7) See page 87, note 11.

(8) *Symplocos racemosa*.

(9) *Andropogon muricatus*.

(10) *Tabernaemontana coronaria*.

urine of bull elephants, will exercise a powerful influence over the bulls if it is applied to the sexual organ of the cow, and so should also a paste of crabs⁽¹⁾, hen's eggs⁽²⁾, and seeds of "Karañja"⁽³⁾.

10. An enticing unguent can be made by compounding "Pathyā"⁽⁴⁾, the feathers and claws of the blue jay and the crow, "Mañ-jisthā"⁽⁵⁾, "Sahā"⁽⁶⁾, "Çāribā"⁽⁷⁾, "Go-çringa"⁽⁸⁾, "Alasaka"⁽⁹⁾ feathers of the arrow,⁽¹⁰⁾ "Suvahā",⁽¹¹⁾ "Kṣoṇī-Kadamba", lotus, "Putram-cāri", "Natā",⁽¹²⁾ wool, hoofs, and urine of sheep, "Mayūri-çikhā",⁽¹³⁾ "Māleya",⁽¹⁴⁾ "Añjana",⁽¹⁵⁾ "Nāga-puspa",⁽¹⁶⁾ and honey.

11. The hunters frighten the elephants with the sound of drums and trumpets and give chase to them till at last the calves become exhausted and stand still. The hunters then promptly secure them. This is capture by "running down".⁽¹⁷⁾

12,13. The hunters bring a number of ropes made of cocoanut-fibre, wire, etc., each sixty cubits long and terminating in many nooses, place the nooses, here and there, in an extensive pit one cubit deep, cover them with dust, secure the plain ends of the ropes to a tree

(1) "Bilvaka". Another reading Substitutes "Tilvaka" which means *Symplocos racemosa* or *Terminalia catappa* (ஹ்ணஹ்).

(2) "Kukkuṭāṇḍa". This may also be translated as "a kind of rice".

(3) *Pongamia glabra* (ஹ்ணஹ். பஹ்).

(4) *Terminalia chebula* (ஹ்ணஹ். பஹ்) or *citrina* and other plants.

(5) Indian madder (*Rubia manjistha*).

(6) *Aloe perfoliatum* or *Unguis odoratus*.

(7) *Herridesmus indicus* or *Ichnocarpus frutescens*.

(8) *Acacia arabica*.

(9) This is an emendation suggested by the editor of the original. If this is the same as "Alasa" it means *Vitis pedata* Wall.

(10) "Iṣu-puṅkha".

(11) *Vitex negundo*, *Cissus pedata*, or *Boswellia thurifera*.

(12) *Tabernaemontana coronaria*.

(13) *Celosia cristata* (ஹ்ணஹ். பஹ்).

(14) Great cardamoms.

(15) Lamp black, antimony, extract of Ammonium, Xanthorrhiza, etc., made into a black pigment for applying to the eye-lids.

(16) *Mesua roxburghii*.

(17) "Anugatākhyo grahaḥ".

and lay lotus stalks, bamboo (shoots), plantain (trees), sugar-canes, etc. (as bait). When the elephants are eating the bait the hunters fell them by pulling the ropes and tie them up. This is capture by "felling together".⁽¹⁾

14. The hunters dig a pit four cubits deep, two cubits broad and five cubits long, and cover the pit with mats supported by light strips of bamboo, and again with earth. Thus they secure the calves that approach the bait and fall into the pit. This is capture by "pit-fall".⁽²⁾

XI. DAILY AND SEASONAL CARE.

1. When the elephant which had lived in the forest happily is separated from its herd and placed in the power of man by ill-luck, it feels hurt by fetters and cruel words and is unable to live long.

2. It thinks again and again of the free and happy life it lived by mountains streams and lotus-ponds, and in the depths of the forest in company with the cows. Then it becomes sorrowful and refuses the food placed before it.

3. When it broods upon its former happiness its ears and tail cease to move and it becomes emaciated and dies in a few days.

4. Its eyes become rheumy. Its navel, hind-limbs, and vent become swollen. It eats no food, feels no joy, and notices nothing: it becomes moody like a king who has lost his kingdom.

5. Egg is a substance which is composed largely of the heat element⁽³⁾ and the elephants did originate from an egg⁽⁴⁾. Being thus subjected to heat from the very time of their origin, elephants take delight in cold water, dust and mire. Water is indeed the very life of elephants as it rectifies their humours. Elephants must therefore be given plenty of water.

6. An elephant which has just been brought down from the forest must be sprinkled over with cold water and given cold water to drink. At sunrise and sunset it must be allowed to remain immersed in water as long as it likes, and then smeared over with medicated ghee⁽⁵⁾

(1) "Āpāta-samño grahaḥ".

(2) "Avapāta", lit. "falling down".

(3) "Taijasa".

(4) See I, 22 and 23.

(5) "Gata-dhauta-ājya", lit. "ghee purified a hundred times". (Ghee means melted butter).

7. After the bath the elephant must be given rice cooked with "mudga" beans⁽¹⁾ and ghee and drinks sweetened with jaggery⁽²⁾ and sugar-canes.

8. The following are items of daily attention arranged in their due order:— 1. Watering⁽³⁾; 2. Setting loose to move about freely; 3. Administering medicines; 4. Brushing; 5. Stabling; 6. Giving food mixed with ghee and jaggery; 7.....⁽⁴⁾; 8. Bathing; 9. Watering; 10. Giving the evening feed mixed with oil; 11. Administering medicines; 12. Stabling.

9. The elephant may be fed with tubers and stalks of lotus and other nymphaea, plantain (trees), nutmeg, "Çrīgātaka",⁽⁵⁾ panic grass,⁽⁶⁾ fig, "Sallakī",⁽⁷⁾ sugar-canes, spike-nard,⁽⁸⁾ Banian, bamboo, young leaves and fruits of "Plakṣa",⁽⁹⁾ "Açvattha",⁽¹⁰⁾ and "Kapittha"⁽¹¹⁾ and other similar things which are acceptable to it.

10. The King of Kalinga says ghee is a most easily obtainable remedy for elephants which have watery eyes or are lean, bilious, injured by carrying heavy burdens or are worn out by constant journeys, to those which are indifferent to the cows, are paralysed or are weakened by loss of blood, flesh or ichor, and to the young as well as the aged.

(1) *Phaseolus mungo* (ถั่วเขียว).

(2) unrefined sugar in lumps.

(3) "Toyāvalokaḥ", lit. sight or seeing of water. In Tamil (a South Indian language) watering domestic animals is referred to as "Showing the water" to them. There is another word "Çayyā" (bed) found in the original before "Toyāvalokaḥ", but printed separately, and hence it is superfluous besides item 12.

(4) "Pūla-dānam" i. e. giving "Pūla". "Pūla" is translated as (1) "pack or bundle" and (2) Straw. The first sense however should be more appropriate since "giving the pack (or bundle)" may be taken to mean "putting to work" and otherwise there is no mention of work in the above time-table.

(5) *Trapa bispinosa*, *astracantha*, or *Barleria longifolia*.

(6) "Dūrva", *Panicum dactylon*.

(7) *Boswellia thurifera*.

(8) "Nalada", *Nardostachys jatamansi*.

(9) *Ficus infectoria*.

(10) *Ficus religiosa* (โพธิ์).

(11) *Feronia elephantum* (มะขาม).

11. In the beginning let an elephant be given one "Kuḍava"⁽¹⁾ of raw rice concealed in grass, and then the allowance increased by one "Kuḍava" a day till it measures an "Āḍhaka".⁽¹⁾ The ration of cooked rice is to be gradually increased at the rate of one ball a day and so should the other prescribed articles of food be rationed with judgment.

12. Boiled wheat and barley are to be given flavoured with cardamom, ginger, pepper, long pepper, asa foetida, the two varieties of cummin,⁽²⁾ "Ajāji",⁽³⁾ and "Viḍaṅga",⁽⁴⁾ as should also boiled wheat and barley mixed with jaggery and ghee, or with rice or cow's⁽⁵⁾ urine.

13. Let the young,⁽⁶⁾ the middle-aged, and the old elephants be allowed one-half, three-fourths and two-thirds of an "Āḍhaka" of oil (a day). This ration of oil will give strength and speed and induce must.

14. A middle-aged elephant can have twenty "Palas"⁽⁷⁾ of medicine and two "Prasthas"⁽⁸⁾ of ghee per day. In the case of others the quantity of medicine and ghee must be altered to suit their strength.

15. Each time an elephant is watered let the water be given mixed with rice and pulses which have been cooked together, curds, oil-cake and jaggery, to make it grow fat.

16. For each "cubit"⁽⁹⁾ one "Bhāra"⁽¹⁰⁾ of grass, four "Āḍhakas" of rice, eight "Kuḍavas" of oil, and ten "Palas" each of salt and jaggery are prescribed.

(1) 16 "Kuḍava"s=1, "Āḍhaka" (=nearly 7 lbs. 11 oz. avoirdupois).

(2) "Jiraka-yuga".

(3) A kind of cummin.

(4) *Embelia ribes*.

(5) Bovine.

(6) The original has "uṣasi yavaśa tailam". But this should be "uṣasi vayasī", etc.

(7) A measure of weight equal to about 1¹⁴/₃₀ oz. troy.

(8) One "Prastha" is equal to 16 cubic aṅgulas (see p. 79, n. 2).

(9) This is in reference to the size of the elephant.

(10) A measure of weight equal to 2,000 "palas" (see note 7 above).

7. After the bath the elephant must be given rice cooked with "mudga" beans⁽¹⁾ and ghee and drinks sweetened with jaggery⁽²⁾ and sugar-canes.

8. The following are items of daily attention arranged in their due order:— 1. Watering⁽³⁾; 2. Setting loose to move about freely; 3. Administering medicines; 4. Brushing; 5. Stabling; 6. Giving food mixed with ghee and jaggery; 7.⁽⁴⁾; 8. Bathing; 9. Watering; 10. Giving the evening feed mixed with oil; 11. Administering medicines; 12. Stabling.

9. The elephant may be fed with tubers and stalks of lotus and other nymphœa, plantain (trees), nutmeg, "Çrigātaka",⁽⁵⁾ panic grass,⁽⁶⁾ fig, "Sallakī",⁽⁷⁾ sugar-canes, spike-nard,⁽⁸⁾ Banian, bamboo, young leaves and fruits of "Plakṣa",⁽⁹⁾ "Açvattha",⁽¹⁰⁾ and "Kapittha"⁽¹¹⁾ and other similar things which are acceptable to it.

10. The King of Kalinga says ghee is a most easily obtainable remedy for elephants which have watery eyes or are lean, bilious, injured by carrying heavy burdens or are worn out by constant journeys, to those which are indifferent to the cows, are paralysed or are weakened by loss of blood, flesh or ichor, and to the young as well as the aged.

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 (2) unrefined sugar in lumps.

(3) "Toyāvalokaḥ", lit. sight or seeing of water. In Tamil (a South Indian language) watering domestic animals is referred to as "Showing the water" to them. There is another word "Çayyā" (bed) found in the original before "Toyāvalokaḥ", but printed separately, and hence it is superfluous besides item 12.

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(5) *Trapa bispinosa*, *astracantha*, or *Barleria longifolia*.

(6) "Dūrva", *Panicum dactylon*.

(7) *Boswellia thurifera*.

(8) "Nalada", *Nardostachys jatamansi*.

(9) *Ficus infectoria*.

(10) *Ficus religiosa* (โศภิต).

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11. In the beginning let an elephant be given one "Kuḍava"⁽¹⁾ of raw rice concealed in grass, and then the allowance increased by one "Kuḍava" a day till it measures an "Āḍhaka".⁽¹⁾ The ration of cooked rice is to be gradually increased at the rate of one ball a day and so should the other prescribed articles of food be rationed with judgment.

12. Boiled wheat and barley are to be given flavoured with cardamom, ginger, pepper, long pepper, asa foetida, the two varieties of cummin,⁽²⁾ "Ajāji",⁽³⁾ and "Viḍaṅga",⁽⁴⁾ as should also boiled wheat and barley mixed with jaggery and ghee, or with rice or cow's⁽⁵⁾ urine.

13. Let the young,⁽⁶⁾ the middle-aged, and the old elephants be allowed one-half, three-fourths and two-thirds of an "Āḍhaka" of oil (a day). This ration of oil will give strength and speed and induce must.

14. A middle-aged elephant can have twenty "Palas"⁽⁷⁾ of medicine and two "Prasthas"⁽⁸⁾ of ghee per day. In the case of others the quantity of medicine and ghee must be altered to suit their strength.

15. Each time an elephant is watered let the water be given mixed with rice and pulses which have been cooked together, curds, oil-cake and jaggery, to make it grow fat.

16. For each "cubit"⁽⁹⁾ one "Bhāra"⁽¹⁰⁾ of grass, four "Āḍhakas" of rice, eight "Kuḍavas" of oil, and ten "Palas" each of salt and jaggery are prescribed.

(1) 16 "Kuḍava"s=1, "Āḍhaka" (=nearly 7 lbs. 11 oz. avoirdupois).

(2) "Jiraka-yuga".

(3) A kind of cummin.

(4) *Embelia ribes*.

(5) Bovine.

(6) The original has "uṣasi yavaśa tailam". But this should be "uṣasi vayasi", etc.

(7) A measure of weight equal to about 1¹⁴/₃₀ oz. troy.

(8) One "Prastha" is equal to 16 cubic aṅgulas (see p. 79, n. 2).

(9) This is in reference to the size of the elephant.

(10) A measure of weight equal to 2,000 "palas" (see note 7 above).

17. One "Āḍhaka" of flour mixed with "Viḍanga",⁽¹⁾ "Akṣi-ba",⁽²⁾ "Kulnāṣa",⁽³⁾ "Māṣa"⁽⁴⁾ and wheat is required for preparing cakes.⁽⁵⁾

18. By constantly moistening the feet (with oil) they remain fresh and cool during the journey; the soles, nails, and eyes remain whole, and hair grows on the head.

19. Moistening the body (with oil) cures the diseases and dryness of the skin, wounds caused by fettering and hitting, stiffness of the limbs, and nervous disorders caused by accumulation of mucus⁽⁶⁾. It makes the bones and limbs supple, fattens slightly, and gives beauty, energy, strength, and happiness.

20. Through anointing (the head?) with ghee the diseases of the eyes are cured and sight is strengthened.

21. Through anointing the tusks the tusks remain firm in the sockets, strong, shiny, fissureless, and fit for striking with.

22. Salt helps to digest the heavy meal, evacuates the bladder, eradicates worms, cures flatulence gives appetite and induces perspiration: it is like ambrosia⁽⁷⁾ to the elephants during the hot season.

23. Salt must not be given with the morning food, for, it is then harmful. But mixed with the evening food it aids digestion and becomes a curative.

24. Ghee mixed with white sugar and milk is beneficial if given with warm food. The sage (Pālakāpya?)⁽⁸⁾ says that as a drink milk is good when cold.

25. The elephant must be allowed to the early morning sun and

(1) *Embelia ribes*.

(2) *Moringa pterygosperma* (नीम).

(3) Sour gruel; an inferior kind of grain, half ripe barley; forced rice; a sort of *Phaseolus*; a species of *Dolichos*. Of these the last two senses seem to suit the context better than others.

(4) *Phaseolus radiatus*.

(5) The quantity of the various ingredients mentioned in this verse also seems to be in proportion to each cubit of the elephants bulk as in verse 16.

(6) "Īta-samīra-kopa".

(7) "Amṛta" or "drink of immortality" which is said to prevent disease old age and death.

(8) It must be remembered that Pālakāpya himself is represented as speaking.

the moon-light,⁽¹⁾ and fed with tasteful rice and wheat not damaged by worms, both of which have been boiled and mixed with plenty of flesh.

26. When the elephant wakes up (in the morning) it must be given a dose of gingili oil mixed with the powders of ginger, pepper, long pepper, the two "Rajanīs",⁽²⁾ "Kuṣṭha",⁽³⁾ Aja-moda,⁽⁴⁾ "Pratyak-puṣpā",⁽⁵⁾ the two "Karañjas",⁽⁶⁾ garlic, "Vacā",⁽⁷⁾ "Sthāpanī",⁽⁸⁾ asafoetida, white mustard, the seeds of "Ariṣṭa",⁽⁹⁾ "Jvalana",⁽¹⁰⁾ "Paṭu",⁽¹¹⁾ "Varā",⁽¹²⁾ Loha-reṇu⁽¹³⁾ "Kṛmighna"⁽¹⁴⁾ and "Nyagrodhi"⁽¹⁵⁾

27. Let a dose of cardamoms, "Vacā"⁽¹⁶⁾, garlic, salt, ginger, white mustard, asafoetida, pepper and "Kṛmi-ṣatru"⁽¹⁷⁾ mixed with oil be administered to the elephant as soon as it wakes up, in order to

(1) The original reads "Çaḡikalā ruciraḡcā sālih", etc. If however the first two words should be printed together as "Çaḡikalārnciraḡ", etc. the meaning will be "rice beautifully (white) like the moon light", etc.

(2) "Rajanī-dvandva". *Curcuma longa* (ขมิ้น) and *Curcuma aromatica* (ขมิ้นดอก)

(3) *Saussurea auriculata*

(4) Common caraway, the species called Ajwaen (*Ligusticum ajwaen*), a species of parsley, *Apium involucratum*.

(5) *Achyranthes aspera*.

(6) *Pongamia glabra* (พื้ง), *Galedupa piscidia*.

(7) *Acorus colamus* (กระเทียมขมิ้น, ขมิ้น)

(8) *Olypea hernandifolia*.

(9) The soapberry tree (*Sapindus detergens*, Roxb.); *Azadirachta indica* (สะเดา)

(10) *Plumbago zeylanica* (เจตมูลเพลิงขาว)

(11) *Trichosanthes dioeca*; *Momordica charantia*; *Nigellia indica*; a species of camphor; a mushroom; salt, pulverized.

(12) See page 89, note 2.

(13) Iron filings?

(14) The root of the jujube; the marking-nut plant; curcuma (ขมิ้น); the plant *Vernonia anthelmintica*.

(15) *Salvinia cucullata* or some other plant.

(16) *Acorus colamus* (กระเทียมขมิ้น, ขมิ้น).

(17) The plant *Erythrina fulgens*.

cure the disorders of phlegm and wind⁽¹⁾.

28. During autumn and summer, the elephant should be fed in the mornings with cooked rice mixed with jaggery and ghee, and in the evenings with boiled rice mixed with salt and oil. But in the other seasons it should be fed with "Kulmāsa"⁽²⁾ mixed with jaggery and boiled rice instead. So also should powders conducive to energy, strength, and digestive power, be mixed with jaggery and administered to it.

29. During the winter⁽³⁾ the elephant has much of phlegm since it (continues to) eat juicy bushes and creepers and sport in mire and water.

30. (In the winter) it is good to feed the elephant with forest grass⁽⁴⁾, anoint its head and feet, and also smear them over with a mixture of oil and lamp-black.

31. Musk-rat⁽⁵⁾, "Citṛaka"⁽⁶⁾, "Vāji-gandhā"⁽⁷⁾, "Kārpāsa"⁽⁸⁾ "Danti"⁽⁹⁾, "Rajani"⁽¹⁰⁾, "Varā"⁽¹¹⁾, all incinerated and mixed with sesamum oil and applied on the head proves beneficial.

32. The points for attention during the cold season⁽¹²⁾ are:—

1. Equipping the stable with screens, fire, and warm liquor either by itself or seasoned with ginger, pepper, long pepper and "Paṭu"⁽¹³⁾;
2. Giving curds with the evening food;
3. Covering the elephant with blankets;
4. Restricting the ration of sugar canes;
5. Feed-

(1) See page 78, note 1.

(2) See page 94, note 3.

(3) "Himartu" or the "season of snow", lasts from about the middle of November till about the middle of January.

(4) i.e. grass that grows on dry ground.

(5) "Cucundari".

(6) *Plumbago zeylanica* (අමුණුකපේලි); *Ricinus communis* (කැත්).

(7) *Physalis flexuosa*.

(8) Cotton (Plant).

(9) *Croton polyandrum*?

(10) *Ourcuma longa* (ආකු); the indigo plant; a grape (or lac).

(11) See page 89, note 2.

(12) "Çigira" lasts from about the middle of January till about the middle of March.

(13) See page 95, note 11.

ing little by little; 6. Exercising daily; 7. Not allowing to play in water and eat grass (that grows near water).

33. The points for attention during the spring are:—1. Keeping the elephants in fragrant gardens; 2. Feeding them with a mixture of boiled rice and wheat, curds and oil; 3. Working them lightly; 4. Setting them free to bathe in rivers and feed on “Balā”⁽¹⁾ peas and pulses.

34. The points of attention during the summer are:—1. Taking the elephants on journeys; 2. Keeping their heads wet with water trickling from leather bags; 3. Anointing their heads with “Çata-dhauta” ghee⁽²⁾ in the mornings, noons, and evenings; 4. Keeping them in the cool moonlight; 5. Feeding them with flour mixed with jaggery and ghee; 6. Stabling them in a cool place; 7. Allowing them to play with water and wet mud.

35. The points of attention during the rains are:— 1. Giving well water to drink; 2. Feeding with grass which grows on (dry) land; 3. Stabling in a place which is free from mire; 4. Fumigating the stable to expel flies and mosquitoes; 5. Giving enemas⁽³⁾; 6. Feeding the elephants with boiled rice mixed with meat-juice of wild game and oil, and with broths which increase the digestive power.

36. The points of attention during the autumn are:— 1. Feeding the elephants generously with green paddy, sprouting pulses, and wheat; 2. Allowing them to remain in a cool place, and swim in water every day; 3. Adding boiled milk and ghee to the evening feed.

37. The points of attention during the winter⁽⁴⁾ are:— 1. Allowing the elephants to bask in the morning sun; 2. Adding the flesh of aquatic and marsh-born animals to the food; 3. Bathing the elephants at least once a day in deep water; 4. Constantly smearing their heads with oil.

38. An elephant which is liable to derangements of the “wind” is cowardly, wayward, restless, proud, fast and dull-witted, has broken

(1) *Sida cordifolia*.

(2) See page 91, note 5.

(3) “Vasty-āsthāpana-karma”.

(4) “Hemana”, same as “Himartu”, explained in note 3, page 96.

nails, "perverse sensitiveness",⁽¹⁾ large and shaky feet, rough skin, scanty hair, visible veins,⁽²⁾ rough tusks and unsymmetrical eyes, and its actions are incongruous.

39. An elephant which is liable to disorders of the "bile" has ugly red eyes, and thin body, trunk, tusks, ears, neck, hind-legs, nails, skin, and hair, is choleric, voracious, weak, and treacherous, and has "superior sensitiveness."⁽³⁾

40. An elephant which is liable to diseases of the "phlegm" has yellow eyes, large-sized trunk tips, trunk, cephalic knobs, etc., has weak desires, weak digestion, and "deep-seated sensitiveness",⁽⁴⁾ is not very irascible, is fearless, steady, easily controlled, swarming with bees (attracted by its ichor), and fond of music, has stout and smooth tusks, and is amorous.

41. An elephant whose humours are balanced has honey-coloured tusks, and well-proportioned and steady limbs, is courageous, is not lean and has copious ichor, good digestion, "correct sensitiveness"⁽⁵⁾ and a bow-shaped back-bone.

42. Even the sages do not correctly understand the disorders of the elephants and the results presaged by their symptoms. How can ordinary men understand them?

43. Only forest-life is prescribed for elephants. When living outside the forest, unwholesome food and drink, food eaten at irregular hours, undigested food, and wandering and sleeping in unsuitable places excite the morbid humours of the body and quickly bring about various kinds of physical and mental diseases.

44. Owing to the constant flow of urine the genitals of an elephant in must become inflamed. They should be constantly smeared over with a "Pala"⁽⁶⁾ of "Gairika"⁽⁷⁾ mixed with ghee.

45. Sucking (the air?), closing the eyes, smelling the earth, trees,

(1) See chapter VIII, verse 23.

(2) The original reads "lakṣya-snāyu-sirā-virūkṣa", etc., which must be corrected into "lakṣya-snāyu-siro-virūkṣa", etc.

(3) See chapter VIII, verse 20.

(4) See chapter VIII, verse 21.

(5) See chapter VIII, verse 22.

(6) See page 93, note 7.

(7) Gold; red chalk.

sky, and wind, sloth, dryness of the mouth, throbbing of the ear tips, want of passion,

46. yawning often, pensiveness, dislike for dust, and redness of urine and the eyes, are the marks of an elephant overpowered by thirst.

47. By the favour of Brahmā water alone suffices to heal all the wounds of the elephants as well as to allay hunger and thirst.

48. Elephants suffer mostly from diseases caused by worms. So only vermicides need to be administered to them daily.

49. Medicinal powders like "Hingvaṣṭaka", "Cūrṇarāja" and "Saptaviṃṣati-guggulu" and oil and ghee are also to be administered to them.

50. One should diagnose the fever known as "Pākala" by means of the same symptoms as those of the fevers of men, and treat it in the same way as one would treat the latter.

51. The pathology of the elephant is the same as that of man. Therefore persons skilled in human pathology should be employed to diagnose and treat the diseases of the elephant in the same manner as those of man.

XII. THE QUALIFICATIONS FOR DRIVERS, ETC.

1. The superintendant of elephants should be wise, king-like⁽¹⁾, virtuous, loyal, pure, truthful, free from vices, modest-eyed, polite, industrious, experienced, and civil in speech. He should have received his training from a good teacher, should be skilful, courageous, philanthropic, famous for curing diseases, and have an all-round knowledge.

2. The king's mahout should be skilled in training elephants, in suiting the use of the goad, cudgel, etc. to the occasion and to the strength of the animal, and in taking care of elephants in rut. He should be skilful in mounting and dismounting, have patience, and be alive to the age and vulnerability (of his charge).

3. The mahouts are of three kinds: the considerate⁽²⁾, the tactful⁽³⁾, and the assertive⁽⁴⁾. The first follows the inclinations of the elephant, the second asserts his will also, and the third depends solely

(1) Probably this is a highly exaggerated way of saying that the superintendant should be fairly well-to-do.

(2) "Rekhāvān", lit. "one who has bounds".

(3) "Yuktimān".

(4) "Bala-vān", lit. "strong".

on his own strength and cunning. These rank, respectively, as the best, the middling, and the worst, and the last is not to be employed.

4. The mahout who is skilful in mounting, dismounting, sitting at the shoulder and at the back, controlling the elephant with his words, feet, and the goad, putting it through its paces, wheeling it around, stopping it, and setting it against those of the enemy, is invincible.

5. A mahout who can bring the vicious elephant under control, contrive the normal animal to have must, make the sluggish become speedy, and the peaceful become murderous, deserves to be patronised by kings.

6. There are three classes of elephants. The means of communicating with them is three-fold. Their paces are three and their movements are of five kinds. There are three modes of sitting at the front and five at the back, six of using the goad (according to the force employed) and five more according to the movements (which the elephant is made to perform through it). The ways of mounting the elephant are eight and of dismounting ten.

7. It has been mentioned already that "Bhadra", "Manda", and "Mṛga" are the three species of elephants. I shall now explain the paces, etc., beginning with "the means of communication".

8. Words, feet, and the goad are the three means of communication. Of these the act of communicating by words is again of three kinds: cajoling, ordering, and threatening.

9. The trainer shall use verb words of Sanskrit,⁽¹⁾ Prakṛt,⁽¹⁾ or the language of the locality, in training the calf. (For example) he shall say "hum" twice to make it kneel down, say "take, take" to make it take anything up, and "above, above" to make it raise its trunk.

10. He shall say "stop, stop" to make it stop, "come, come" to make it approach, and say "go, go" to make it go.

11. He shall thrust his feet inside the collar, take a firm hold of the elephant with his thighs, sit like a pillar holding the goad in his right hand and the (other) "instruments for giving pain"⁽²⁾, like the cane, in his left, and heedfully guide the animal by firmly prodding it with his big toes and heels.

(1) Sanskrit is the classical language of India and "Prakṛt" is the generic name of a number of ancient dialects from which some of the modern vernaculars of India have been derived.

(2) "Totram".

12. To make the elephant go forward he shall prod it with both the big toes (kept level and pushed forward). He shall prod with uplifted toes to make it raise its face up, and with toes bent down to make it lower its face. To make it turn to the right he shall prod it forwards with the big toe of his left foot and vice versa to turn it to the left, and dig backwards with his heels to make it move backwards.

13. Going slow, going fast, and running are the three paces. Going forwards, going backwards, turning to the right, turning to the left, and turning round are the five movements.

14. The place between the neck and (the visible part of) the back bone is called "Kakuda" ⁽¹⁾. There are three modes of sitting to the front of it known respectively as "the front", "the middle" and "the back" ⁽²⁾ postures.

15. (Of these) one is sitting with the feet stretched (down) ⁽³⁾, another is sitting with bent knees, and another, at the back (of the last two), is sitting on the knees.

16. (The five postures of sitting behind the "Kakuda" are:) sitting with a foot stretched (down) on either side of the backbone of the elephant, sitting with the knees bent which is called the "bent-knee posture", the above (with the knees kept) raised up which is then called the "raised posture", sitting with one knee raised up and the other bent down called "the tortoise-posture", and sitting with the knees bent double and kept close together called "the frog-posture".

17. In compliance with the request of Skanda ⁽⁴⁾ and also out of pity for the world which He found was being oppressed by the big and powerful elephants, Brahmā created a being. The corners of his eyes are red with anger, he wears a tall crown and is called "Aṅkuṣa" ⁽⁵⁾ because he holds "Kuṣa" ⁽⁶⁾ grass in his hand.

18. He lives within the four kinds of goads and brings the vicious and excited elephants under control. The sages have prescribed the use of those four kinds of goads only. They are shaped like the thun-

(1) Shoulder.

(2) "Adhama", lit. "lowest".

(3) "Ekaḥ prasāritaḥ pādaḥ".

(4) The son of Śiva the Third Person of the Hindu Trinity, and the generalissimo of the gods.

(5) The goad.

(6) *Poa cynosuroides*.

der bolt, the half-moon, claw, and the thorns of the "Ketaka"⁽¹⁾ respectively.

19. The goad is used in six places:⁽²⁾ at the "Vitāna",⁽³⁾ the "Vidu",⁽⁴⁾ the neck, the outer corners of the eyes, (the top of) the head, and "Avagraha".⁽⁵⁾

20. The face of the elephant is to be scratched at the front slightly with the goad in order to make it go forward, scratched with a backward motion in order to make it go backward and scratched with an upward motion to make it climb up. The goad is pressed down to make the elephant climb down. The elephant is struck on the left side to make it turn to the right and vice versa to make it turn to the other side. Thus is the goad used for different purposes.

21. The goad may be struck in lightly, struck in so as to cause pain, struck in with force, raised high and then struck in, struck in and pulled across (through the flesh), or struck in and turned round and round. In the first case the goad goes in half an "aṅgula"⁽⁶⁾ and this depth is increased by half an "aṅgula" in each of the succeeding operations.

22. An elephant comes under control if it is driven with a goad (the point of) which has been smeared with a paste of the flowers of "Madhūka"⁽⁷⁾, honey, "Kāla"⁽⁸⁾ "Vacā"⁽⁹⁾ "Açva-gandhā"⁽¹⁰⁾, "Bilva"⁽¹¹⁾, onions, black pepper, and cow's⁽¹²⁾ urine.

(1) *Pandanus odoratissimus* (พญายอ). The thorns are found at the edges of the leaves.

(2) The original has "ṣaḍvidhā" lit. "in six ways".

(3) Probably the correct word here is "Vilāṅga" (chapter VI, verse 8).

(4) Chapter VI, verse 7.

(5) Chapter VI, verse 7.

(6) See page 79, note 2.

(7) *Bassia latifolia*.

(8) The plant *Cassia sophora*; a red kind of *plumbago*; the resin of the plant *Shorea robusta*.

(9) *Acorus colamus* (กระดังงา).

(10) *Physalis flexuosa*.

(11) *Aegle marmelos* (มะขาม).

(12) Bovine cow,

23. They say that a paste of "Koçātaki"⁽¹⁾, ginger, black pepper, long pepper⁽²⁾ white mustard, "Kāraskara"⁽³⁾, "Tikta" salt, and "Viṅga"⁽⁴⁾ applied to the goad brings the elephant under control.

24. (A paste of) centipedes, head of the chameleon, "Çilā"⁽⁵⁾, bile of the horse, hair of the deer, slough of the snake, and scorpions, applied to the goad cures the elephant of its pride.

25. The cudgel is used on five places, namely, the two sides, the two "Niṣkoças"⁽⁶⁾, and the root of the tail.

26. One gets upon the elephant in eight ways: by (the aid of its) two ears, four legs, and the face, and by "Sampluti" i.e. running after the elephant and then jumping upon it.

27. One gets down from the elephant in ten ways: by (the aid of its) tail, the four legs, the face, the two sides, and the two ears."

28. Thus did the sage Pālakāpya expound the life of the elephants to King Romapāda. The king, on his part, maintained the sage with great esteem, and (by) devoting himself to the care of the elephants he defeated his enemies and ruled long over the whole world.

29. The ancient sages called the lotus "Roma".⁽⁷⁾ Since the feet⁽⁸⁾ of the king were marked with (lines resembling) the lotus he was named "Romapāda."

30. Pālakāpya was called so because he protected⁽⁹⁾ the elephants and was a Kāpya⁽¹⁰⁾ by his lineage.

(1) *Trichosanthes diæca*; *Luffa acutangula* (บวบเหลี่ยม); or *Luffa pentandra*.

(2) This and the preceding two are referred to together as "Katuranya" (ตี่รายนฺยา คือ ขิงขมิ้น พริกไทย และ ดีปลี).

(3) A poisonous medical plant (*Strychnos nux-vomica* และอื่น ๆ).

(4) *Embelia ribes*.

(5) Red arsenic; camphor.

(6) Chapter VI, verse 12.

(7) The sense commonly ascribed to this word is "hair"

(8) "Pāda"

(9) "Pāla" is derived from √ *pā* or *pāl*, meaning "to protect", etc.

(10) "A male descendant of Kāpi".

May scholars be pleased to correct this meagre "Mā-taṅga-līlā" which I have obtained from the treatise of the great sage⁽¹⁾ which is like the unfathomed sea.

(1) The treatise referred to is the "Hastyāyurveda" of Pālakāpya. The printed copy of the text published by the "Ānandāgrama" press, Poona, in 1894, contains 717 pages (8vo).

