

GYNECIC NOTES
TAKEN AMONG THE AMERICAN INDIANS.

BY

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(With illustrations.)

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THE study of the natural history of disease is one of the highest duties the physician owes his profession. A knowledge of the influences of race and heredity, as well as of climate and other conditions, is important to the study. As the years go by the Indians, as a race, lose their distinctness: as savages, their characteristics. The time for investigating is passing. Never before have members of a savage race been taken as wards by an enlightened Government for the purpose of imparting its civilization on philanthropic grounds and by scientific methods. For these methods and their application there are no precedents, so serious errors are made and influences introduced worthy of careful study. Collective investigation of diseases as seen in the Indian race cannot fail to be of advantage to that race and to aid the service in many ways.

The life of the physician in charge of tribes at remote agencies is dull to a serious degree, unless he may interest it in investigation of medical matters connected with those in his charge. As the result of such investigation on my part, and to encourage like study by other physicians in charge of Indian tribes, the following notes are presented.

It will be seen that the facts and ideas are not mine alone; agents' and physicians' reports and other sources have been drawn upon freely. Still more valuable information has been obtained from summaries furnished me by the physicians of about half of the agencies in the service. With them is divided any merit attaching to this report, and my sincere thanks to them are expressed here.

Where in these papers I have used the expression "this tribe" or "this reservation" or "agency," the reference is to the Crow tribe, reservation, or agency, in Montana, at which I was physician until my resignation in October, 1889. Leaving the service voluntarily, but not without regret, I still feel a deep interest in it, and any correspondence concerning it, as correction or controversion of the following pages, will be appreciated.

MENSTRUATION.

The age of puberty among Indians it is not easy to learn, since it is the custom of most tribes for the girls to marry before the menses appear. A curious result of this custom came under my observation at this agency. Since the girl menstruates after marriage and its attendant pleasures, the idea prevails that the menstrual flow is the result of sexual connection. In two instances Indian men have come with the complaint that their daughters in the boarding school had been tampered with, as their menses had appeared. Girls in the camp will conceal and deny the flow if it occur before they have been sold in marriage.

The early marriage and consequent sexual excitement, with the entire absence of modesty in Indian thought and conversation,¹ would tend to cause precocious menstruation, and even in those girls who are in school till after puberty it occurs earlier than among white maidens of the same latitude. In a mission school on this reservation containing forty Indian girls, the mother-superior informs me that there are none above 12 years of age who do not menstruate.

The same is true of the Government school at this place. This latter school has been under my personal observation, and concerning ten girls in it, now menstruating, I am able to fix positively the age at which the menses first appeared. Indians, having no means of record, seldom remember ages of children accurately after the first few years. In the case of these ten girls, they were received into the school when quite

¹ This lack of modesty is well exemplified by the only name, constantly used in this tribe, for the vagina, "ish'-ē-dē"; "ish'" meaning a sac or receptacle for "ē-dē," the male organ.

young, and the record made at the time is almost certainly correct. Three are half-breeds, seven full-blood Crow Indians. They menstruated first at the following ages: One at 14½ years; one at 14 years; two at 13 years (the two at 13 are not yet entirely regular); two at 12 years (one of these at 12 is not yet regular); two at 11 years (one is a consumptive and has not menstruated since); one at 10¾ years (has menstruated four times at proper intervals).

From so few cases it is of course impossible to make reliable deductions. The average age for these ten girls is 12.21 years, while, according to the only American statistics (Emmet's), in the white race the average is 14.23 years. This early average agrees with my own opinion, drawn from other sources. It is also in accord with the opinion of such physicians in charge of Indians as have favored me with their views.

The duration of menstruation in the case of the above ten school-girls is usually two days, rarely exceeding three. They have been remarkably free from pain or other unpleasant symptoms on the establishment of the function or at its recurrence. I am quite sure full-blood Indians in this latitude do not menstruate so freely as white women, not usually exceeding three days.

The St. Ignatius Mission School, Flathead Reservation, Montana, contains three to four hundred Indian children, received into the school so young that the ages of the girls can be learned with considerable certainty. The sister-superior of that institution writes me that "in general the Indian girls begin to menstruate younger than the white girls, and those who at the age of 14 have not yet their menses generally die of consumption."

Capt. Pratt, of the Carlisle (Pa.) Industrial School for Indians, gives me this reply: "Upon the subject of menstruation, we find that girls from Southern tribes begin much earlier than those from the North. We have had one case at 7 years; more than half of those from the South begin before 13 years. Those from the North average with our Anglo-Saxon girls."

Menorrhagia frequently brings the woman to the physician

for treatment, otherwise I am not consulted concerning the function.

"Most readers are aware," writes Napheys in "Physical Life of Woman," "how toilsome are the lives of the Indian women among our Western tribes, and also how singularly easy and almost painless is their child-bearing. The pangs of travail are almost unknown to them. The cause of this has puzzled even physicians. We can tell them. It is because it is an inviolable, a sacred rule among all these tribes for the woman, when having her monthly sickness, to drop all work, absent herself from the lodge, and remain in perfect rest as long as the discharge continues."

In the Isle of Fate, New Hebrides, menstruation is called *na-fu-lien*, or separation; the women, during the flow, must live in a separate house. If a man becomes unclean by contact with her, he must be ceremonially purified.

"And if a woman have an issue, and the issue in her flesh be blood, she shall be put apart seven days; and whosoever touches her shall be unclean until the even" (Lev. xv. 19).

Pliny assures us that the presence of a menstruating woman blights vegetables, turns wine sour, and produces a number of other evils.

Of the Lower Brulé Sioux, Dr. Graham writes: "They are very superstitious in regard to menstruation; never have connection at that time, live in a separate lodge or house, never come near a sick person, believing, if they do, that the sick will die, even though it be their own offspring. The soiled clothes are not washed, it being considered very unclean and disgraceful to wash them. They are placed in a little roll, and each month the roll for that month is deposited in a different fork of a convenient bush or tree."

Of the Western Shoshones of Nevada, Agent John S. Mayhugh (1885) wrote: "Notwithstanding the general health of the Indian, there is no increase of population, for the reason that there is a tribal tradition or superstition governing the Indian women that they remain apart from their families, in a little house of their own, called the sick-house (*junne-garnee*), for a period from twelve to fifteen days in each month. The Indian men could not be induced to touch or handle anything the women have used during these periods of retirement,

believing implicitly that all kinds of evil result if they violate this custom of their fathers."

Orthodox Israelites observe seven clear days after cessation of menstruation, making an average of about twelve days during which intercourse is prohibited (Lev. xv. 28).¹

Such similarity of customs and superstitions in nations so diverse is curious.

Once, I am told, the custom of going apart to a tepec built for the purpose, and spending the time in solitude and rest, prevailed among menstruating women of the Crow tribe. I am very sure only the barest vestiges of the custom remain at the present day. I find them living in the crowded lodge, going about the household work, and, I am told, even not repelling the sexual advances of the husband or lover.

As to the time of the menopause, I am utterly without data, since when a woman has passed 30 it is in very few cases possible to determine, within six or eight years, her age. If I should venture an opinion, it would be that the cessation is later than in the white race.

Of hysteria I shall speak briefly elsewhere. Uterine diseases may occur frequently; as in white communities which have not received a gynecological education, these seldom come to the physician. Uterine fibroids of small size I have found frequently. I have treated some severe cases of ovarian pain, and I am not infrequently asked relief from leucorrhœa, often specific, however.

MEASUREMENTS OF INDIAN GIRLS.

It seems to me the female form as Nature made it could not more nearly be found than in the Indian maiden, not yet deformed by work and innocent of stays or distorting dress of any kind.

A woman, eminent in the science of physical development and dress reform,² furnishes me with the following as the measurements of the perfect female form: Height, five feet five inches; bust measure, thirty-one inches; waist, twenty-six and one-half inches; hips, thirty-five inches.

¹ See letter from Dr. Asher, Israelite, to Dr. Playfair, p. 91 of the latter's work on Midwifery.

² Mrs. Frank Stuart Parker, Chicago.

I have secured and tabulated below certain measurements of Indian girls.

MEASUREMENTS OF INDIAN GIRLS.

No.	Age.	Weight.	Height.	Chest.	Waist.	Hips.	Remarks.
	Yrs.	Lbs.	Ft. In.	In.	In.	In.	
1	25	112	5 1	31½	29	35	Nullipara.
2	20	150	5 5	37	32	37	"
3	13	130	5 4	33	30	34	"
4	25	165	5 2	37	33	37	"
5	15	126	5 2	33	31½	36	"
6	13 ¹	174	5 4	38	36	40	Unipara.
7	18	140	5 4	32	30	36	Nullipara.
8	15	130	5 5	34	29	35	"
9	18	145	5 4	33	29	35½	"
10	20	170	5 6	35½	32	36½	"
11	18	145	5 5	33	32½	35½	"
12	16	120	5 6	29	27	32½	"
13	19	174	5 4	35	34	40	Not learned.
14	18	140	5 5	32½	31½	36	"
15	23	130	5	33	29	34	Unipara.
16	17	110	5 2	30	26½	31	Nullipara.
17	16	130	5 3	31½	29	33	"
18	15	105	5	28½	28	31½	"
19	25	182	5 7	38	37	42	Three children.
20	18	135	5 2	32	27	34½	Nullipara.
21	12	105	5 2	28½	26	30	"
22	17	145	5 2	33	31	36	"
23	18	125	5 1	33½	30½	35	"
24	17	125	5 1	31	29	34½	"
25	14	165	5 6	33½	31½	37½	"
26	19	150	5 4	32	30½	36	"
27	15	135	5 4	33	29	37	" half-breed.
28	14	100	5	31	26	33	"
29	15	120	5 1	33	30	33½	"
30	13	100	5	28½	26	31	"
31	14	110	5	30½	27½	33½	"
32	14	90	5	31	26½	30	"
33	13	85	5 1	27½	22½	29½	"

Chest measure is the mean of inspiration and expiration. Waist measure is taken where belt is worn, at smallest part of waist, just above crest of ilia. Hip measure is around largest part of hips. All measures are taken over single "squaw dress."

A summary of the above table shows thirty-three girls; youngest, 12 years; oldest, 25 years; great majority about 17 years. Three only had borne children.

Averages are: Age, 17½ years; weight, 132½ pounds; height, 5 feet 3½ inches; chest, 32½ inches; waist, 29¾ inches; hips, 34¾ inches.

¹ The girl and her father say 13 years. The child is 2 years old. The girl is apparently 17 or 18.

Greatest differences between chest and waist were in girls whose measurements were 37-32-37 and 31-26-33. Least difference was in girl whose measurement was 33-32½-35½.

FECUNDITY.

The relative facility of conception in the Indian I have not been able to establish statistically; with some exceptions,¹ it is the opinion of physicians in charge of Indian tribes that they are less prolific than the women of civilized races. I am inclined to believe that they were, in the native state, a little less frequent in conception than white women; and I am well convinced, owing to the habits, in some tribes, of living apart during pregnancy and lactation, and the great prevalence in other tribes of prostitution and syphilis, that in their present state pregnancy occurs less frequently than among other races. Small families rather than large are the rule.

I have noticed especially the infrequency of twin pregnancies in this and other tribes. Concerning this the physician to the Tulalips (Washington) writes me: "If it [twin birth] occurs the fact is concealed, as they consider it a great disgrace and will kill one or both of them. The Indian compares a woman who has more than one child to a dog, a wolf, or other animal of that kind." The same idea prevails in tribes that have, as far as is known, never been associated with these. Dr. W. W. Graves, of Anadaska, I. T., speaking of twin births among the Kiowa, Comanche, and Wichita tribes, says: "Now comes a sad story. When two or more are born in a single labor our Indians let but one live. If a male and female, the latter is always destroyed at once; if both are girls, not infrequently both are killed; if both are males, there is sometimes a choice made; sometimes the sire kills both, as he considers that his wife is no better than a sow."²

Among certain bands of Sioux, on the contrary, twins are sought after, as they are esteemed evidences of good luck to the household. On the Western Shoshone Reservation, in

¹ Certain tribes on the Pacific coast are the exceptions. Dr. E. Buchanan, of Tulalip Agency, reports greater fecundity, families of eight to twelve children being frequent. Dr. Woodward, of Neah Bay Agency, writes me that "some squaws have twenty children."

² Mr. Tait, in his recent book, "Diseases of Women and Abdominal Surgery," says twin bearing is atavism.

Nevada, no case of twins has occurred for ten years. Among the Lower Brulé Sioux are two living women of triplet born to a woman of that tribe some years ago.

ABORTION.

The prevalence of induced abortion in the different tribes varies from zero to infinity. In some tribes, as far as I am able to ascertain, the vice is unknown. Of the Western Shoshones of Nevada the physician writes me: "Abortion is practised *not at all*." In others, concerning whom my information is accurate and thoroughly reliable, it is practised to an enormous and incredible extent.

I have no explanation to offer as to why it is unknown in some tribes and largely practised in others, since the difference may exist between different bands of the same tribe, as in the case of the Sioux of Dakota. Its distribution and its method of procurement oppose a theory of its adoption from the whites.

Of the Pimas of Arizona, Dr. H. C. Yarrow embodied the following in his report to the Bureau of Ethnology for the year 1879-80: "The women of the tribe, well aware that they will be poor should their husbands die—all his property being given away at his death, by Indian custom—and that they will have to provide for their children by their own exertion, do not care to have many children, and infanticide, both before and after birth, prevails to a great extent. This is not considered a crime, and women of the tribe practise it. A widow may marry again after a year's mourning for her first husband; but, having children, no man will take her for a wife and thus burden himself with her children."

Children, after passing infancy, are so light a burden to Indian parents, in this (the Crow) tribe at least—the tribe being subsisted by the Government—that I cannot think the fear of the burden, except in infancy, is a motive for infanticide. Indeed, since a child draws full rations from its birth, it aids rather than hinders the support of the family. It is the burden of bearing to term the child in utero, the care of it during lactation, and the interference during a part of this time with the pleasures and profits of sexual intercourse, that prompt Crow women to procure abortion with great frequency. The

extent to which it is practised I may suggest by introducing the statement, which I have reason to believe is correct, of a Crow woman, about 45 years of age, known to me, who says she has had produced upon herself thirty-three abortions; as they are procured at a very early stage of pregnancy, this is easily possible. I may safely say it is practised in this tribe to an extent unequalled among any civilized people. Of the Apaches, a tribe remarkably chaste and free from syphilis, Howard Thompson, their physician, writes (1887): "It is more than probable that infanticide and criminal abortion are practised in the camps to a considerable extent."

In some tribes abortion is involved in much concealment and mystery, and the secret of potions and brews possessing abortifacient powers is believed to reside with the old midwives. My friend Dr. E. Buchanan, of Washington, informs me that with the Tulalips of that section a decoction is made of cedar sprouts, hops, barberry, and other ingredients.

The methods, however, in use in almost every tribe in which abortion is practised is killing the fetus and inducing uterine contractions by external violence. As usually applied, this is technically termed "tramping." The pregnant woman lies upon her back, and a heavy squaw, upon her knees, mounts the belly and walks thereon till the uterus and adjacent organs have been subjected to most brutal bruising. This treatment for other ailments I have seen applied frequently. Sometimes the milder treatment of thorough kneading with the fists will be effective. In some tribes a board is placed across the pregnant belly and a squaw sits heavily upon either end. Capt. Clark, in his work on Indian sign language, asserts that it is produced among the Arapahoes by the pregnant woman throwing herself violently upon the pommel of the saddle or across a log.

In this connection it may be remembered that in those who are subjects of syphilitic taint—of whom there are many—and in those with whom abortion has occurred till the "habit" is formed, its procurement is easy by any method.

LABOR.

It is my purpose to avoid the ethnology of medicine among the Indians, so in treating of labor among them I shall con-

fine myself to stating briefly the practice in childbirth of some of the tribes.

It is rare for physicians practising among Indians to be called to attend the women in parturition. The reasons for this are two: first, the Indians look upon childbirth as a



FIG. 1.—Manner of carrying child on the march.

physiological process, for which Nature is competent without skilled assistance; second, a sense of modesty forbids the attendance upon the female in labor of any male, white man or Indian, physician or layman. This native modesty, this womanly shame concerning all matters pudendic, is found in every race, savage and civilized. In passing I may say,

never has this reserve yielded so much as it has to the demands of science in the hands of the gynecologists of this generation, and men of this specialty may well have a care that they urge not their demands without due occasion.

This antipathy to receiving assistance at the hands of the physician is overcome as the tribes progress toward civiliza-



FIG. 2.—Manner of carrying child on shoulder.

tion, and it is especially noticeable that half-breeds almost constantly seek the physician's aid, even in those tribes, Sioux and others, where full-bloods retain their antipathy undiminished. This is due in equal measure, I think, to decreased prejudice and increased difficulty in labor from infusion of white blood.

In posture in labor there is greater diversity among Indians than among the females of the white race, but the

position assumed by the larger number is kneeling or squatting, the same as assumed for defecation, with the thighs separated, the head resting on some object in front, hands grasping thighs or grasping the hands of some friend. The naturalness of this pose is evident when we consider that the accessory or voluntary forces exerted in parturition—the only forces, by the way, that can be influenced by posture—are the



FIG. 3.—Indian mother and child.

same as those constantly brought into play in defecation; and if the woman would to the best advantage "assist" the uterine contractions toward the expulsion of the fetus, we must have her assume that position habitually assumed in defecation, as the one wherein the accessory muscles act most efficiently in expelling the contents of the rectum.

Occasionally, as reported to me by Dr. Ambler Caskie, of Standing Rock Agency, Dak., they get on all-fours in true

beast style as the head presses on the perineum - a posture which I fancy would, by calling in the aid of gravity to antagonize uterine efforts, at least favor the integrity of the perineum.

It would be interesting, in this connection, to observe what posture in labor is taken by those animals whose mode of progress is at will upon two or four feet, and who upon "all-fours" have the hips more elevated than the shoulders.

More rarely the orthodox supine or lateral, or in some cases prone¹ or erect,² posture is assumed, the Indian woman claiming great latitude in the matter.

In some tribes a special lying-in tepee is prepared, to which the pregnant female repairs at the time of labor. In others she goes forth from the tepee alone or accompanied by a native midwife, seeks some convenient stream, and, being delivered of her child on its bank, cleanses herself and child by bathing in its waters. These, however, are not the common methods, the family lodge usually serving, those not desired present being sent out during labor.

If a woman falls in labor while the band is upon the march she turns aside with one or two female friends and gives birth to the child; if a stream be near by she bathes self and child in it; the child is wrapped in the swaddling clothes, placed in the "bonnet," or bound to the board; the mother mounts her pony, the babe is carried by one of the friends, and the party hurries on to rejoin the column.

Few frontiersmen living much with the Indian tribes but have often seen this occur, and I have frequently had the circumstances minutely detailed to me. Before one measures by this practice the facility of labor among Indian women and its freedom from pain or danger, it is well to bear in mind the fact, which some perhaps do not know, that an Indian never grows too ill to accompany the march, or, rather, that when on the march Indians seldom halt on account of the sickness of one of their number, no matter how severe the sickness may be; and, in past days, for a single lodge to halt and allow itself to be detached from the band was to offer

¹ "Frequently lie upon the stomach with knees flexed under abdomen" (Dr. J. J. Best, Fort Berthold, Dak.).

² "Position generally standing" (Dr. A. Wilgus, Yakima, Wash.).

itself an easy prey to some hostile party always hovering near.

So deeply established is this custom that in my own experience within two years past I have known several deaths to occur while Indians were on the march from distant parts of the reservation to the agency for Government rations. In such cases the bodies are carried on to some convenient camping place where a burial scaffold can be erected.

It is universally admitted that labor is easier, quicker, and safer with savage than with civilized women, and my experience confirms this. Still, difficult and protracted labors occur. As illustrating this and some other points of interest, I will relate the following case occurring in my practice about a year ago:

A young woman, pregnant with first child, fell in labor. Three days later the band came to the agency, some forty miles from their home, and she was brought with them. On the fourth day of labor, the child not having been born, the girl's father sent for me. With an interpreter I went to the tepee. I at once bared my arm to make an examination. The woman, by a slit in the dress, bared her belly above the pubes and submitted it to me. She was half-recumbent on some quilts. A small round hole had been dug in the earth beneath where her breech rested, for receiving the waters; they had, I was informed, come away some hours before. When, however, I separated her knees for the touch, she objected, crying, *Cow-cke, cow-cke*—"It is bad"—and put the knees firmly together.

I explained that probably the child was crosswise and it could be delivered and her life saved only by putting in my hand and turning it right (she was having severe pains and was considerably exhausted); at any rate, that I could not help her at all unless she let me put my hand where I chose. This was all very carefully explained and chloroform offered to prevent any pain. She still firmly said, "No!" Later in the evening I sent another interpreter to place the matter before her. The result was the same. After night I visited her again with an Indian interpreter (the former had been a negro), but with no better result. She said she had rather die than submit.

Late the next day a messenger came for me; she was suffering greatly, about to die, and had agreed for me to "take the baby out." The camp was a mile from my office. When I reached it she had just been delivered of a dead child and after-birth, both of which had been removed from the tepee before my arrival. A wide and accurately adjusted binder covered the empty belly. The next day they came again for me. She was passing much matter and was in a bad way. I gave a sublimate vaginal douche. Her modest preparation for this was to take bits of quilt and cover thighs and lips of vulva, leaving only the aperture exposed. After a short septic fever she made a rapid recovery.

Their modesty would not be so striking were it not that, almost to a woman, the females of this tribe are prostitutes and for a consideration will admit the connection of any man.

The digital examination is not only not allowed the physician, but is rarely practised by the native midwife; and Dr. Joseph Graham, in charge of a Dakota tribe, plausibly suggests that "in this is to be found the explanation of the marked absence of puerperal fever and other puerperal diseases due to infection, though they are surrounded by the vilest hygienic and sanitary conditions."

The small amount of assistance rendered by the native midwife or some friendly squaw, and the treatment of difficult labors, are very similar in the various tribes.

It is universally the custom for the midwife to kneel behind the suffering woman, and, passing both arms around her, lock the hands above the fetal tumor and press it firmly downward. Sometimes the same is done by gradually tightening a strap or wide belt passed around the belly.

In difficult or slow labors among the Sioux of Sisseton Agency, writes Dr. N. McKitterick, the "shaking" process is often resorted to. The patient is slung on the back of some strong woman, who walks about the room, "shaking" her severely, the object being to *shake it out*. In other tribes the woman is suspended by passing a rope under her arms and over the poles at the top of the lodge. Among the Cheyennes, it is said, she is suspended by the wrists, a squaw seizing and compressing the uterine tumor, endeavoring to "squeeze out" the child.

¹ Dr. J. M. Woodburn, Jr., Rosebud, Dak.

Physicians are not infrequently called to remove retained placenta, this being the most frequent difficulty connected with labor.

In most tribes the cord is not severed till the placenta comes away. Dr. A. P. Fitch, of Yankton, Dak., gives an example of the prevalence of this custom: "A woman gave birth to a child at 6 p.m.; at 10 a.m. the next day I was called to remove the after-birth, the child remaining attached to the cord during the entire time, the fear being that the woman would bleed to death if the cord was cut before the placenta came away. I removed the placenta; the woman got up at once and, shaking herself, walked over to the other side of the tepee and sat down as though nothing had happened."

The native method of assisting the delivery of the placenta when retained is worthy of notice as casting light on the origin of a method lately associated with the name of Credé. Indians of almost every tribe use some method of external compression of the uterus.

Dr. T. A. Coskery tells me that, "if not expelled by the natural forces, the placenta is driven out by a bandage around the body pressing the womb, and this bandage is gradually tightened until effective." Dr. Chattle, of Pine Ridge, Dak., informs me that, among another band of Sioux, "as soon as the child is born the woman is bound tightly around the waist to expel the placenta—a *crude* method 'Credé.'"

A binder is applied, more or less skilfully, by every tribe. The cord is cut or torn, sometimes with a good deal of ceremony, and left alone or tied with a sinew or with itself. Both cord and placenta are classed among the great number of charms or fetiches revered by Indians, and they are disposed of in an especial manner or preserved for use in their incantations. The bit of cord sloughing off may be tied in a rag and worn as an amulet around the baby's neck.

There is no defined lying-in period after labor with Indian women. They may continue with the march, or, if in camp, may at once bathe themselves in an adjacent stream and go about household duties. An Apache woman delivered by the agency physician of Anadarka, I. T., the same evening walked some distance to the river to go swimming. An Absaroke woman, delivered two miles from my office, came the next

morning to my office, walking and bearing the babe on her back, wading an icy river on the way.

While the practice of getting about at once is not unusual, yet the custom in the Crow tribe, with which I am familiar, and others of which I have information, is for the woman to remain a few days an "invalid," reclining most of the day and sleeping at night propped in a half-sitting posture, that the discharges may flow freely and not clot—so she may "drip," as she expresses it—being relieved, during these days, of the household work.

(To be continued.)

never be given and vaginal douches are of but little use. All procrastinating methods are to be avoided. Purulent endometritis is a surgical disease and requires surgical procedures for its relief.

It appears to me that my duty is simply to present to you the most prominent facts connected with the causes and treatment of endometritis, in order that the discussion may be somewhat guided thereby. I have purposely omitted the pathology and minute clinical details, as the title of the paper does not permit their introduction. I beg that you will not consider this imperfect paper as all that may be said in favor of this most striking and, I believe, true conception of endometritis and its complications.

I offer the paper also as a plea to the general practitioner that he consider endometritis in its intimate relationship to the peritoneum and be governed thereby in his management of it.

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FACTORS IN THE INCREASE OR DECREASE IN INDIAN TRIBES.

- I. *The Indian population is increasing.*
- II. *This increase is less than the normal increase of races.*
- III. *The slowness of increase is due in less degree to high death rate than to low birth rate.*
- IV. *Some of the factors both of high death rate and of low birth rate may be lowered or eliminated.*

These are the conclusions I have drawn from a study of the subject in all its aspects. The last proposition is the one

¹Concluded from page 768.

bringing the question within the scope of this work and commending it to the attention of physicians.

I. The assertion that the Indian population is increasing is based on the aggregate reports of agents and agency physicians.

In the case of forty-two reservations from which I have received recent reports in answer to an inquiry of the status of Indian population—not based alone on official statistics, but as well on the opinions of those in charge of, and familiar with, the various tribes—twenty-four reported increase, thirteen reported decrease, and five reported at a standstill.

For seven years ending June 30th, 1888, from all agencies were reported ten thousand one hundred and eight deaths, eleven thousand four hundred and ninety-two births, giving an increase of one thousand three hundred and eighty-four.

Agents' reports for same period of years, including agencies where no physicians were located, show an increase of four thousand seven hundred and thirty-seven. These figures have been maintained in the face of enormous reduction in the rolls of many tribes.

The Indian population was beyond question originally greatly overestimated. This admission is pretty generally made by recent writers on the subject. It is thus stated by Lieut.-Col. Otis, U.S.A., in his book, "Our Indian Question" (p. 5), to which I refer those desiring a full review of the matter: "With the light which documentary history and published correspondence of a private nature have thrown upon the former condition of the aborigines, their slight punishment at the hands of the whites, their subsequent wanderings, and the varying political and social organizations in which they were included; from a careful consideration of their habits and the extent of country required to subsist them, the assertion that the population has not diminished to any considerable extent could be maintained with a fair degree of plausibility. . . . To make the statement briefly, I believe the Indian population of the United States (full and mixed blood, within and without tribal relations), as shown by the Ninth Census, differs very little numerically from the actual existing Indian population of the seventeenth century."

The first estimates that approached accuracy were made

for the purpose of issuance of rations—and Indians are as adept “repeaters” as are border voters; moreover, every individual possessed a variety of names, and their custom of adoption frequently gave the same child several parents, on each of whose ration tickets he might be placed under a different name. It is well known that ration rolls have almost invariably carried more Indians than actually existed.

From the greater permanency of Indians on reservations, and greater familiarity of employees with them, each census is more accurately taken than its predecessors, and the decrease shown in the case of almost all the wild tribes has been chiefly due to this increased accuracy.

In the face of this and of the decrease actually occurring in many Northwest tribes, the figures presented on a previous page have been maintained, and the statement is made that the Indian population is slowly increasing.

It may be observed, however, that if instead of increase there is slight decrease occurring, this does not affect the succeeding propositions.

II. The second of these propositions needs no argument. The fact that one is at pains to prove an increase is sufficient to indicate that the increase is below the normal for races. It may be observed that the negro race in the United States, during the same period that the Indian race has been under observation, has tripled or quadrupled itself by natural increase; that the population of Europe has in the same way, since 1800, just doubled.

III. The death rate among Indians is probably high; there are no reliable statistics by which this may be determined. One who may speak with authority on such matters says: “Indian mortality seems excessive until we compare it with the death rate among the lower class of our own people and the colored race, where the sanitary conditions and previous habits of life are similar to those among the Indians. These show that the death rate is not excessive and great mortality is not a race characteristic.” *Per contra* I may say the *light mortality* to number of cases treated, as shown by agency physicians’ reports and frequently commented on, is due simply to the fact that, as a rule, it is the trivial complaints

¹ Capt. R. H. Pratt, Carlisle Industrial School.

that are brought to the physician, the more severe being treated by measures in which they have more confidence. An Indian will ride half a dozen miles for salve for a chapped lip, but will die of pneumonia or obstructed labor without asking the physician's aid.

However the mortality may be, it is evident to any one acquainted with this race that the birth rate is abnormally low. The diet, dress, habitations, and surroundings of Indians I believe to be rather healthier than of the poor and thriftless class of white people to be found in any community, and I believe the death rate is not greater. The difference in the ratio of births and deaths is due to the low comparative birth rate of the former. White women of this class are notoriously prolific, bearing numerous children; with Indians, on the contrary, large families are the exception. The Crow tribe, of less than two thousand five hundred people, is divided into six hundred and thirty families, which gives less than four to each family, and this includes parents and often grandparents and relatives by affinity or adoption, leaving the average of offspring to each child-bearing woman decidedly lower than in white communities.

In the section on labor and matters related thereto I have adduced evidence of the rareness of twin births and of the low comparative fecundity of Indian women; add to this the enormous prevalence of abortion, both procured and from venereal taint, commented on at the same place, and abundant reason is seen why the birth rate should be low. The well-known inaptitude to pregnancy of prostitutes bears an important part in keeping down the birth rate in some tribes. The habits of separation of male and female during menstruation and lactation, practised in some tribes, has an influence in the same direction.

I believe, moreover, that impotence occurs in male Indians more frequently than in males of the white race. I am applied to time after time by stout men of virile age for drugs to enable them to secure an erection.

Excessive venery, a potent factor toward the production of impotence, is a vice in many tribes. The practice of the *Bō-tē*¹ doubtless tends to the same result. The influence of

¹ The practice of the *Bō-tē* is a most depraved form of sexual perversion.

excessive equitation may be cited. The impression that very much horseback riding tends to impotence is quite general. For calling recent attention to it and tracing it historically credit is due to Dr. Win. A. Hammond.¹ Chotomski is authority for the statement that there are to this day many among the Tartars of the Caucasus who are rendered impotent by excessive riding on horseback. Hippocrates, in his day, records the same results from the same cause among that people.² Lallemand reports several cases of impotence due to seminal losses as consequences of the constant friction of the genital parts in excessive equitation. According to him, the friction and shock to the perineum resulting from contact with the saddle cause irritation of the efferent ducts; thence the morbid process passes to the epididymis and the testicles, which are kept in almost constant state of erethism, emissions resulting spontaneously. Pressure exerted upon the spermatic vessels, and the constant interruption of the due course of their nutrition, are suggested by Davanburg³ as the cause of the loss of procreative desire and ability. "Inordinate equitation," declares Nysten,⁴ "produces complete loss of sexual desire and impossibility of erection in men who are otherwise vigorous and in good health." Foresters and country physicians, who pass a good deal of their time on horseback, are mentioned by him as among its subjects. The habitual compression of the vesiculæ seminales and of the

in which the vagina of the female is substituted by the mouth of the bote. These perverts, which are found in many of the Indian tribes, assume the feminine dress and manner in childhood, but the vice to which they subsequently devote themselves does not generally become a practice until toward puberty. They wear the "squaw" dress and leggins, part the hair in the middle, and affect the voice and manners of women, with whom they constantly associate. The voice, features, and form, however, never so far lose masculine qualities as to make it at all difficult to distinguish the bote from a woman. They very closely resemble a class described by Hippocrates as found in his time among the Scythians of the Caucasus and called *ἀναρπίεις*. (See paper by Dr. Holder, N. Y. Medical Journal, December 7th, 1889.)

¹ American Journal of Neurology and Psychiatry, August, 1882, p. 330. "Impotence in the Male," p. 157. The authorities quoted in this connection are cited by Dr. Hammond.

² Hippocrates (translation), Paris, 1843, i., note 58, p. 497.

³ "Des Pertes Seminales," Paris, 1838, part i., p. 581.

⁴ "Dictionnaire de Médecine," Paris, 1838.

prostate gland appear to him to interfere with the secreting power.

No people probably ride so constantly as do the plains Indians of the West and Northwest. Frequently the mother dismounts to allow the entrance into the world of the infant, and, with it strapped to her back, remounts and proceeds on her journey. Long before the child has learned to walk he is tied upon the pony's back, and there he spends much of his time till, as a wizened ancient, he must again be tied to prevent his falling from the decrepitude of age. If excessive horseback riding does ever cause impotence, it may be assumed a potent factor among these Indians.

The fact may here be noted that Indian women, wives of white men, bear more children than those married to Indians, such families on this reservation averaging twenty-five per cent larger than full-blood Indian families.

It has been conceded that the death rate is high, and the reasoning written out above has brought me to the conclusion that the birth rate is abnormally low.

Consumption, scrofula, syphilis is the triad almost constantly named when I have asked the causes of mortality among Indian tribes. This reply agrees with statistical reports.

IV. The means for the prevention of syphilis, simple, natural, and thoroughly efficient, but, I fear, impracticable in the present stage of human development, has been pointed out—*chastity*.

A curious fact of Indian population statistics is the excess of females in almost all tribes and the constant increase of this excess. This is due to low female mortality, since of children born the males exceed the females. For the seven years 1882-88, of 11,492 births 5,987 were males, 5,505 females, giving an excess of males of 482. On the other hand, of 10,108 deaths 6,988 were males and only 4,020 females, showing large excess of mortality among males—this, too, during a time when no Indian wars have occurred with their attendant peculiar dangers to males. And it is well known that there is not the difference in exposure to weather among Indians as among other races. I offer no explanation of the facts.

Those interested in causation of sex may use the fact that in half-breed families where the father is white, the mother Indian, females predominate, the proportion on this reservation being fifty-seven per cent females, forty-three per cent males.

It may likewise be of interest to sociologists to know that one-sixth of the Indian population (Alaska excluded) was, even twelve years ago, mixed-bloods;¹ and this proportion is enormously increased in the civilized tribes, the Cherokees, for example, having 8,000 full-blood and 10,000 mixed-blood. This means simple and comparatively rapid amalgamation.

VENEREAL DISEASES.

In the study of venereal diseases among Indian tribes one comes upon some interesting facts. Some of these facts plainly controvert popular impressions; from others may be drawn conclusions of deep moral import. I may say that I have never, until I began these investigations, had so forcibly impressed upon me the relationship between chastity and the venereal diseases, nor ever greater reasons to feel shame for the white race in the centuries of high civilization.

Before I dwell upon these conclusions I shall present certain facts which speak for themselves.

Of 505,940 cases of sickness treated by agency physicians in the seven years ending June 30th, 1888, 6,280 are reported as syphilis, primary and later forms, and 7,475 as gonorrhœa and its sequelæ.

The figures representing the number of cases of syphilis treated are, I think, both actually and proportionately somewhat too large. This statement is based upon the fact that in the schedule of diseases furnished by the Indian Department for the report of agency physicians, chaneroid, the *local* venereal sore, does not appear. When this disease presents itself either the title must be written in as "other venereal diseases," or it is included with chancres and allowed to swell the list of cases of primary syphilis. In my experience cases of the local sore far exceed cases of primary syphilis. I incline to the opinion that by the carelessness either of the

¹ Report of Commissioner of Indian Affairs, 1876.

physician or of the statistics clerk chancroids are classed as primary syphilis.

Again, it is the practice in Indian countries to call all old sores—as ulcers, simple, varicose, serofulous, etc.—*veneral*, and some physicians adopt this lay diagnosis. So intimately, indeed, have serofula and syphilis been associated by eminent medical men (bearing upon which I shall present important facts in another place) that physicians may often charge to the latter what is the work of the former alone.

For these reasons I think more cases of venereal diseases are reported than treated.

If the number treated were accurately reported I should believe it still too great proportionately to the number of all cases treated, since it has been my experience that an Indian will more surely seek relief of the physician for a sore or other ailment of his penis than for a disease affecting the heart, lungs, or other vital organ.

In short, I do not consider the average prevalence of venereal diseases among Indians as excessive.

A curious fact, and one not generally known, is that while in some tribes of Indians venereal diseases are enormously prevalent, other tribes are absolutely free from them. A single instance will illustrate this most strikingly.

On their reservation in Montana are two thousand five hundred Crow Indians. My intimate acquaintance with this tribe enables me to speak with great certainty. Of the adults I feel safe in saying that four-fifths, male and female, suffer or have suffered from one or more forms of venereal disease.

Sixty miles east in the same State are located nine hundred Northern Cheyennes with identically the same surroundings. During two years the agency physician, Dr. W. M. Burger, has treated not a single case of venereal disease and has been unable to learn of the existence of a case at any time in their history.

At the seventy agencies from which reports are rendered, in the year ending June 30th, 1888, were treated one thousand nine hundred and twenty cases of venereal disease. Of these seventy agencies there were *twelve* at which no venereal disease of any form was treated, and *twenty-three*, or

one-third, at which not a single case of syphilis, "primary" or "constitutional," was treated.

The popular impression that the venereal diseases are universally distributed among Indian tribes is seen to be erroneous.

The table below, constructed for the purpose of showing the relation of chastity to the prevalence of the venereals, is introduced here as indicating in detail the distribution of venereal diseases among a number of Indian tribes. About thirty reservations are represented, these being all, except one,¹ from which definite information concerning the two conditions tabulated could be obtained.

This information is from reports of Indian agents and others, and through personal knowledge or letters from agency physicians. The figures following the title of the informant indicate the year of the report.

RELATIONS OF CHASTITY TO SYPHILIS.

Tribes or Agency.	Chastity.	Venereals.
Flatheads, Montana.	"Hard to find white community where adultery is so rare" (Agent, 1878).	"Consumption and scrofula are the only diseases with which they are affected" (Agent, 1882).
Blackfeet, Montana	"Moral" (Agent, 1888).	"Free from venereal diseases" (Agent, 1882).
Rees, Mandans, etc., Ft. Berthold, Dakota.	"In no wise chaste towards whites or among themselves" (Agency physician, 1889).	"Every living Indian on reservation and generations unborn affected" (Agency physician, 1889).
Northern Cheyennes, Tongue River, Montana.	"Proverbial for chastity of their women" (Agent, 1887).	"I have yet to hear of a case of venereal disease among them" (Agent, '87).
Crows, Montana.	Absolutely without chastity (Author).	Enormously prevalent (Author).
Gros Ventre and Assiniboine Sioux, Fort Belknap, Montana.	"Women have bartered honor for food and clothing" (Agent, 1885).	"The class met with more than any other are the venereal diseases in their various forms" (Agent, 1882).
Assiniboine and Yankton Sioux, Ft. Peck, Montana.	"Morals low" (Agent, 1883).	"Diseases contracted by immoral practices prevail" (Agent, 1883).
Sioux of Cheyenne River, Dakota.	"Morals good" (Agent, 1878).	"Remarkably free from venereal diseases" (Agency physician, 1888).

¹ This exception is of the Quapaw tribe, I. T. The agent in 1884 reported, "The women are chaste as a rule," and in 1886, "Almost to a soul affected with syphilis." On this exception I have no comment, except to say it stands in too great a minority for consideration.

Tribes or Agency.	Chastity.	Venericals.
Yanktonais Sioux, Crow Creek.	"As a rule virtuous, but, I am led to believe, less so than most people suppose" (Agency physician, 1889).	"A few cases of gonorrhoea and an occasional chancre are treated" (Agency physician, 1889).
Brulé Sioux, Dakota.	"As a rule chaste, as to both white and Indian men" (Agency physician, 1889).	"In two years' practice, one case primary, two secondary syphilis, four gonorrhoea. Population, 1,145" (Agency physician, 1889).
Sioux of Devil's Lake, Dakota.	"Morals need not cause any solicitude" (Agent, 1878).	"Remarkably free from venereal diseases" (Agency physician, 1887).
Sisseton Sioux, Dakota.	"Morals as good as could be expected" (Agent, 1878).	No case reported for year 1888.
Sioux of Pine Ridge, Dakota.	"As far as I can learn, women are chaste, especially toward white men" (Agency physician, 1889).	"Very small number of cases, chiefly in half-breeds, of gonorrhoea and syphilis" (Agency physician, 1889).
Sioux of Rosebud, Dakota.	"Women chaste, as they understand it" (Agency physician, 1889).	"Taking same number of young men, white and Indian, I think I can safely offer to produce five Indians to one white that have never had venereal trouble" (Agency physician, 1889).
Sioux of Standing Rock, Dakota.	"Do not live together without marriage" (Agent, 1889).	"Very little of this trouble exists" (Agent, 1886).
Bannocks, Ft. Hall, Idaho.	"Dissolute" (Agent, 1889).	"Venereal diseases have taken hold and permeated the system of all" (Agent, 1886).
Klamath, Oregon.	"Generally chaste" (Agency physician, 1889).	"Acute venereal diseases rare" (Agency physician, 1889).
Walla-Walla, Cayuse and Umatilla of Umatilla, Oregon.	"Moral habits good" (Agent, 1888).	"Syphilis is unknown" (Agent, 1888).
Neah Bay, Wash.	"By no means chaste" (Agency physician, '89).	"I do not think there is an Indian on reservation who has not had syphilis in some form" (Agency physician, 1889).
Osage, Idaho.	"Osage Indian women are chaste toward white men" (Agency physician, 1889).	"The Osages have no venereal diseases" (Agency physician, 1889).
Round Valley, California.	"Our Indian women know not what chastity is" (Agency physician, 1889).	"Seventy-five per cent affected with venereal diseases" (Agency physician, 1889).
Hoopa Valley, California.	"In their sexual relations morality is frequently disregarded" (Agency physician, 1883).	"Fearfully and often disgustingly prevalent" (Agent, 1883).

Tribes or Agency.	Chastity.	Venereals.
Otoes and Missouri, Indian Territory.	"In virtue and chastity they stand comparison" (Commissioner Indian Office, 1880).	"Seem perfectly free from hereditary taint or poisonous inoculations of any kind" (Agent, 1886).
Kaw, Indian Territory.	"Chastity they have not" (Agent, 1881).	"All are diseased" (Agent, 1881).
Cheyennes and Arapahoes, Indian Territory.	"Arapahoes corrupted and debauched; Cheyennes more chaste" (Agent, 1886).	"Among Arapahoes especially, syphilis is common" (Agent, 1884).
Mescalero and Jicarilla Apaches, New Mexico.	"I do not think there is much immorality among them" (Agent, 1884).	"I have failed thus far to find them suffering from venereal diseases" (Agent, 1884).
Pimas, Arizona.	"Of low moral standard" (Agent, 1881).	"Chief curse is venereal disease" (Agent, 1880).
Mohaves, Yumas, Chimeluevis, Arizona.	"Licentiousness unrestrained" (Agent, '82).	"So prevalent that few of the Indians are exempt from its influence" (Agent, 1878).
Moquis, Pueblo, Arizona.	"Living huddled in villages, each house communicating with others, induces promiscuous intercourse" (Agent, 1878).	"Many are affected with venereal diseases" (Agent, 1878).
Tabeguache Utes.	"No licentiousness that I can see or learn of" (Agent, 1881).	"Very little venereal disease and no new cases" (Agent, 1883).
Western Shoshones, Nevada.	"As to Indians I cannot say; as to white men, Lucretia could not be more chaste" (Agency physician, 1889).	"The venereals do not exist here to any extent worth mentioning" (Agency physician, 1889).

From this it can be seen that all grades of prevalence can be found; from those tribes which are absolutely free to those wherein every member is a victim, and very brief study of the table establishes beyond controversy that:

The venereal diseases prevail in any tribe in exactly that degree in which the men and women of that tribe have ceased to be chaste in celibacy and faithful in wedlock.

It may be said that this is a truism and that I am making ado to prove a fact not controverted. I shall suffer the criticism complacently, if I may emphasize the warning I shall later draw from this.

The assertion I shall next make cannot be made without controversy nor admitted without shame. It is that *the venereal diseases were introduced among Indian tribes by the white race.*

The adverse theory is not new. That syphilis was contracted by the sailors who came with Columbus, through their intercourse with the natives, was suggested in 1518 by Leonard Schmans, and in 1519-21 by Ulrich von Hutton and Francastori. The most curious testimony in support of it is advanced by my respected professor, Dr. Joseph Jones, of New Orleans.¹ Dr. Jones is an indefatigable investigator, and among the multitude of objects he has subjected to study is the story of an early race told by relics found in Indian mounds of the South. On bones dug from these mounds Dr. Jones thinks he sees the marks of syphilis, and these diseased bones are, in the words of the investigator, "the most ancient syphilitic bones in the world." These statements may pass for what they are worth. I give them without comment.

The evidence upon which are based the conclusions stated above is, to my mind, satisfactory. The second conclusion has been reached after careful investigation and thought—investigation entered into without prejudice and pursued without partiality. I was committed to no theory of origin and had no temptation to bend facts to the support of any.

The conclusion reached is, from the nature of the case, not positively demonstrable, concerning, as it does, the history of people, for some generations back, whose only history is tradition.

The evidence in support of the position taken is drawn from Indian tradition; opinions of those who from their opportunities and investigations may be called experts; and from fair deductions from facts in the known history of certain tribes.

Without going beyond the facts presented in this chapter, I may assert it as fairly proven that the venereal diseases cannot prevail in races where chastity is observed. So, if an extraneous corruption of the morals of the Indian race can be established, that will carry with it a strong presumption that the source of corruption is responsible for the venereal infection.

I believe, to a certain degree, in the depravity of the human race. I have studied the Indian character too attentively to fancy that I find in him an exception. I believe in the

¹New Orleans Medical and Surgical Journal, June, 1878.

depravity of the Indian. But this I may say: I do sincerely believe that several of the virtues, and among them chastity, were more faithfully practised by the Indian race before the invasion from the East than these same virtues are practised by the white race of the present day.

This I think reasonable from the nature and customs of the Indian. The race is less salacious than either the negro or white race. Early marriages are the universal custom among them. These marriages are contracted before the age of puberty in the girl and about that age in the man. True, a small stipend, a few horses or a few robes, were required for the purchase of the bride, but there the expense ended. She was more than self-supporting beyond. This hindrance was not one-tenth that placed, by social requirements, in the way of honorable marriage and forcing towards dishonorable intrigues among civilized people.

At the very awakening of sexual power the natural and legitimate means of its gratification was provided.

The bond thus early contracted was easily broken. If the pair was ill-assorted, either was easily cast off by the other. There was no need for a scandal and feed lawyers, a decree and public disgrace. They simply went apart and each chose another mate.

If one woman did not suffice to satisfy the sexual passion of the lord of the lodge, he chose another, younger and prettier; by custom usually the younger sister of the one already his wife.

It is the uncurbed passion in the male, and not in the female, that leads to unchastity in races; and in the Indian race every facility was offered for the legitimate gratification of this passion, and in consequence, as a rule, the Indian race was chaste.

At a certain part of that wild, savage ceremony, the Sun Dance, a factor so powerful in Indian life, the women of the tribe stood forth to "prove their chastity" in the presence of the tribe gathered in solemn council, declaring, if maidens, that they had never known a man; if wives, that they had been faithful to their husbands. The hearers were then adjured, by all things revered, if any could impeach their assertion, to speak forth the charge.

The Indians are not reformers. No race with greater pertinacity retains habits once acquired. There is no inherent power in the race or in its religion to turn it from a downward course. Any of the tribes that were unchaste would be found so now. That the women of some tribes are now more careful of their virtue than the women of any other community whose history I know, I am fully convinced.

I have referred to a few bands of Northern Cheyennes living in Montana. My investigations concerning these have been carefully conducted. I have the testimony of the agent; of the agency physician; of the Jesuit priests who have lived years among them most intimately, studying their daily life and character; of the cowboys who go in and out among them, and who, isolated from refined woman's influence, stop at no cost to secure the favor of the Indian maiden and offer an urgent market if her virtue is to be bought; of the Crow Indian men with whom visits are exchanged, and of the young men of their own tribe. Agent, physician, priest, cowboy, the comely Crow and Cheyenne brave, unite in saying the Cheyenne women are chaste. Testimony could not be more conclusive.

Other tribes there are whose character is as good. Of the Sioux of Crow Creek the agent (Anderson, 1882) says: "The chasteness and modesty of the women might well be the boast of any civilized or enlightened people." Of the Western Shoshones of Nevada, Dr. Robertson, their physician, writes me (1889): "As to white men, Lucretia could not be more chaste; as to Indian men I am unable to say." Dr. Wm. Thornton Parker, Beverly, Mass., formerly an Indian surgeon in Minnesota, says: "The native Indian women are virtuous and faithful to their lovers and husbands." Of the Lower Brulé Sioux, Capt. Dougherty, First Infantry U. S. A., writes: "I believe I can say truly that these people are a moral people, and live more in accordance with the knowledge they have of right and wrong than many of their white neighbors." Special Agent Heth, in 1886, said of the Assiniboine and Yanktonais Sioux, the only bands of Sioux who are notoriously licentious: "I do not think the young or old men are as moral now as they were when I associated with the Indians some thirty-odd years ago."

The question occurs, if some are chaste and others not so, if those now lewd were probably at one time chaste, to what must we charge the change? To that influence which is slowly working the change from savage to civilized life—to the contact of the Caucasian race.

The story of their degradation is simply told. The buffalo that had furnished food, house, and dress was driven from the prairie, the elk from the mountains. Untaught to labor and without labor to do, the Indian hungered and shivered in poverty. The white man offered money for virtue, and the Indian woman bartered the gem she had cherished sacredly for food and dress for herself and her naked and starving children. It was a bitter struggle, one that has not yet been told in the fierce words it merits, and which can receive only passing notice here.

Lieut. Whitman, stationed at Fort Grant in 1871, writes of the Apaches then there: "I had come to feel respect for men who, ignorant and naked, were still ashamed to lie or steal, and for women who would cheerfully work like slaves to clothe themselves and children, but, untaught, held their virtue above price."

Here and elsewhere to establish the chastity of Indians I have not introduced those who from afar write pretty fancies of the Indian of romance. I have had testify those who live among them and who must bear with their faults and see their vices in the magnitude of proximity.

Williams, a missionary to the Winnebago and Santee Sioux, says simply: "Being very poor, many of the women prostituted themselves to get something to eat."

A physician associated with the Sioux of Fort Peck tells briefly: "They were chaste till the disappearance of the buffalo, then were driven by poverty to prostitution."

W. L. Lincoln, a number of years agent to the Assiniboine Sioux and Gros Ventres at Fort Belknap, Mont., tells the story of the change in that tribe as it came about under his eye: "When I first came here, six or seven years before, game of all kinds was plenty, an Indian could live off the proceeds of the chase, and there was no want but what they could supply, if willing to exert themselves. Then chastity was the rule rather than the exception. A few years later

game was practically extinct; then the bounty of the Government was needed and should have been granted with no stinted measure. But, instead, the Government gave just sufficient to keep the wolf from the door. They had not yet commenced to depend upon the earth or its bounties. White men were in the country; the soldier had also come to stay. The Indian maiden's favors had a money value, and what wonder is it that, half-clad and half-starved, they bartered their honor, never very refined, for something to clothe their limbs and for food for themselves and their kin?"

I have heard the same story time and time again from the Crows and other tribes.

If unchastity is due to white contact, and if venereal diseases are due to a specific poison, then by the white race was this poison introduced. This the Indians themselves assert.

From the Assiniboine Sioux and Gros Ventres of Fort Belknap—fearfully debased tribes—comes the assertion through their physician, Dr. John V. Carroll: "These Indians claim that no disease of a venereal nature existed until they first came in contact with white men; that their women were virtuous and loyal to their husbands."

The Sioux of Devil's Lake, Dak., assert that "what few cases they have were contracted from the Ree Indians with whom they exchanged visits."

The Rees are with the Gros Ventres and Mandans at Fort Berthold, of whom the agent says: "The early traders among these people left their mark in many forms of constitutional troubles, syphilis the most common."

The Indians of Neah Bay, Cal., and of Round Valley on the same coast, claim that syphilis was brought among them by the Spanish. The Klamaths of Oregon claim that neither this disease nor gonorrhoea existed among them before their acquaintance with the whites. The tribes at Anadarka, I. T., claim that these diseases were contracted by them from the Mexicans and early traders. Of Hoopa Valley, Cal., Indians it is asserted with much positiveness that they were inoculated by Russian sailors in 1838 or 1840.

This is the constant opinion of agents and physicians whose opinion I have been able to ascertain.

Proof more positive in its nature is offered. The physician to the Sisseton Sioux writes me that in his tribe he has treated but two cases of gonorrhoea, both *contracted from the whites* during the harvest season.

The physician to the Yanktons reports his tribe free of venereals, "except several cases of gonorrhoea among the women *near Fort Randall*," the neighboring military post.

Of the Klamaths the agent (1878) reports: "A great many of the older Indians suffer from the effect of syphilis contracted years ago when they made annual trips to Oregon City and other distant points—primary syphilis is rare, as the Indians generally marry young and are not more licentious than white people. *Prostitution is confined to a few who visit the fort.*"

From Siletz, Oregon, the agent reports (1881): "Other diseases are in great part owing to Indians going outside, and, as is usually the case, associating with the lower order of whites and returning with diseases of the venereal kind."

"The touch of the white man has spread a blight which only time or death will eradicate," is the pathetic story of the Puyalups of Washington.

"Since travel has ceased on the old overland trail venereal diseases have apparently decreased and but few patients appear," is what the agent writes of the Pima Indians of Arizona.

The same story can be told of a hundred tribes. In the introduction of these diseases one factor deserving a moment's notice is the military. It has been satirically asserted that soldiers have killed more Indians with disease than with lead. Capt. Theo. Swan, Eleventh Infantry, brings forward (1875) as noteworthy, in contradiction to such opinions as mine stated below, that notwithstanding the presence of a considerable body of troops near the Cheyenne River Sioux, not a case of venereal infection had been seen by the physician. This fortunate escape is not usual. J. A. Stephens, agent of another band of Sioux, asserts (1878): "The morals of the women would be better if the agency was a greater distance from the garrison."

An agent, writing of the Assiniboine and Yanktonais Sioux, charges (1883): "Among all the demoralizing elements

they come in contact with, none is greater than the army. The military is in close proximity to the Indian camp, and it is an utter impossibility to prevent the women from being made prostitutes as long as they are permitted to visit and remain within the limits of the garrison."

Dr. Wm. Thornton Parker¹ says: "My experience with the Indians has been that, except in the vicinity of military garrisons, very little of acute venereal disease is to be found."

In view of the facts that enlisted men of the United States Army are totally without social recognition; are usually on detail at most humble and unsoldierly labor;² that four-fifths of them are from necessity unmarried—it need not cause wonder that, as a class, no class ranks so low, or could be so great a menace morally to the Indian, or so cast shame on the honor and wisdom of the nation which they are expected to defend.

From a medical standpoint it could well be advised that military posts be removed from Indian reservations, since the soldiers and the Indians are constant sources of mutual corruption and venereal infection.

A singularly strong argument for the theory of Caucasian origin of venereals can be drawn from the table on page 49. One even cursorily acquainted with the history of the Indian tribes of our continent will at once observe that if the tribes be divided into "hostile" and "friendly" it will be seen that the latter have, in chastity and health, suffered far the worse.

The Sioux (save two bands), the Apaches, the Cheyennes, Blackfeet, Utes, have in the main escaped, while the Crows and Gros Ventres, the Yumas, Mohaves, Pueblos, and others have suffered severely.

Tribes who have been isolated, or who have held aloof from the whites, retained their tribal relations, and declared for non-intercourse, are chaste and free from taint. The tribes who have opened their arms to receive the white man, or who have been subdued by him, have been debauched and inoculated.

More than half a century ago, when trappers and hunters first invaded the Northwest, the two powerful Indian tribes

¹ Annals of Gynecology and Pediatrics, March, 1892.

² This chapter was written before the reversal of the Dell Wild court-martial turned popular attention to the subject.

found in that region were the Crow and the Blackfoot. The Blackfoot was the wary and dreaded enemy, the Crow the welcoming friend: the Crow woman is debauched and diseased, the Blackfoot woman is chaste.

Of the Northern Cheyennes the agent writes (1886): "Ignorant, obstinate, and hard to control, the men are honest and women virtuous." A part of this same unconquerable tribe in the Indian Territory is thus contrasted with their neighbors, the Arapahoes: "The Cheyenne men are more warlike, the Cheyenne women more chaste."

Of the Tonkawas it is said (1888): "Always friendly to the whites, their principal diseases are syphilis, consumption, scrofula, and malaria."

The Pimas, Maricopas, and Papagos of Arizona have always been friendly and self-sustaining. In 1880 the agent wrote of them that "venereal diseases are their greatest curse."

At a Colorado agency are gathered three dissimilar tribes, and Agent Wilcox (1883) says of them: "It is a fact worthy of notice that the immoral practices that lead to this affection [syphilis] are more common among those bands that are on the most friendly and intimate terms with the whites than among the more warlike. The Yuma, Tonto, and Mohave tribes, that have been subdued to the point of servility, are the most notoriously profligate of all the Indians on the reservation; and it is claimed by persons long resident among them that the White Mountain Indians (Apaches), who, next to the Chiricahuas, are the most warlike, are freest from this besetting sin of all reservation Apaches."

Of another tribe, whose name has gone into proverb as bitterly and stubbornly hostile, it is said (1886): "The Comanches are cunning, bloodthirsty, and warlike, but are greatly superior to the Kiowas and Apaches . . . in the unquestionable chastity of their women."

The conclusion is inevitable. The Indian woman's chastity has yielded to the importunity of the white man's passion, and her reward has been the venereal infection which curses and blights her race.

The holiest mission of the physician is to preach a higher morality. The history here recorded of the constant association and ratio between licentiousness and venereal diseases

among the tribes of American Indians cries out for chastity in tones only less impressive than those which thundered from Sinai the imperial command, "Thou shalt not commit adultery."

MECHANISM OF AXIS-TRACTION FORCEPS.

BY

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(With five illustrations.)

THE consideration of the mechanism of the axis-traction forceps includes the following points:

1. The pelvic curve of the instrument should be made to correspond as nearly as possible with the curve of the unyielding portion of the pelvic canal.
2. The cephalic curve should be so constructed as to give a firm grasp of the head of the child, without too much compression.
3. The traction rod and handle should be so placed that traction will be made as nearly as possible in the direction of the pelvic canal.
4. The instrument should be made of material that can be sterilized by heat without injury.

The determination of the direct pelvic curve has been one of the most difficult questions in the whole history of the construction of forceps. The original forceps had no pelvic curve, and Leveret first added this improvement. Since his time the pelvic curve has been many times modified. Some inventors have tried to make it conform to what they conceived to be the true pelvic axis; others have modified it empirically without any basis from which to calculate what it should be.

The question resolves itself into two sections: 1. What is the true course of the head of the child through the un-