the companionship of men and for their ways, and had sought the society of the women. His penis had not at first diminished in size, but as it gradually lost the power of erection it had also become atrophied. Before he became a *mujerado* he had, as he informed me with evident pride, possessed a large penis and his testicles were "grandes como huevos"—as large as eggs—a statement which the old chief unhesitatingly confirmed.

His voice was of high pitch, thin and cracked, especially when he became excited, which he did very readily; and he indulged in more gestulations than any Indian I had ever seen.

In the pueblo of Acoma, about twenty miles from Laguna, I ascertained that there was another *mujerado*. Accompanied by the old Laguna chief I paid a visit to this village in the autumn of 1851, and had the opportunity of making a thorough examination of the individual who served in that capacity.

There was no remarkable development of the mammary glands; the pubis was devoid of hair; the penis was greatly shrunken, not being over an inch in length when flaccid, and of about the circumference of the little finger. The testicles apparently consisted of nothing but connective tissue, as no pain was experienced on strong pressure being applied to the soft flat masses, about the size of a kidney bean, which lay at the bottom of the scrotum. There was no genital deformity of any kind whatever.

The limbs and the whole body were full and round-

ed, and there was not a sign of hair anywhere except on the scalp. The voice was shrill and weak. As he stood naked before me, the whole appearance was more that of a woman than of a man. When he put on his woman's dress, it was impossible to discover any mark of difference between him and the women among whom he lived. He was apparently about thirty-six or seven years old, and had been a *mujerado* for nearly ten years.

These were the only mujerados I saw in New Mexico, though I was told that every pueblo had one, or even more. Their raison d'être is evidently to be found in the force of tradition, which still exists to a great extent with the Pueblo Indians of New Mexico. In referring further to that subject, I am actuated by a desire to shed as much light as possible upon a custom and its results, not only important from an anthropological but a neurological point of view, and which will doubtless disappear ere long before advancing civilization, even if they have not already done so.

I found it very difficult to ascertain the cause of the atrophy of the genital organs, and of the great changes which have been produced in other parts of the organism, but I finally succeeded in obtaining some information, which was certainly correct as far as it went, for it was derived from several authentic sources, including the subjects themselves, and was uniformly to the same effect.

A mujerado is an essential person in the saturnalia or

orgies, in which these Indians, like the ancient Greeks, Egyptians and other nations indulge. He is the chief passive agent in the pederastic ceremonies, which form so important a part in the performances. These take place in the spring of every year, and are conducted with the utmost secrecy, as regards the non-Indian part of the population. For the making of a mujerado, one of the most virile men is selected, and the act of masturbation is performed upon him many times every day. At the same time he is made to ride almost continuously on horseback. The genital organs are thus brought at first into a state of extreme erethism, so that the motion of the horse is sufficient to produce a discharge of seminal fluid, while at the same time the pressure of the body on the animal's back-for the riding is done without a saddle-interferes with their proper nutrition. It eventually happens that though an orgasm may be caused, emissions can no longer be effected, even upon the most intense degree of excitation. Finally the accomplishment of an orgasm becomes impossible. In the meantime the penis and testicles begin to shrink, and in time reach their lowest plane of degradation. Erections then altogether cease.

But the most decided changes are at the same time going on little by little in the instincts and proclivities of the subject. He loses his taste for those sports and occupations in which he formerly indulged, his courage disappears, and he becomes timid to such an extent that if he is a man occupying a prominent place in the councils of the pueblo he is at once relieved of all power and responsibility, and his influence is at an end. If he is married, his wife and children pass from under his control, whether, however, through his wish or theirs, or by the orders of the council, I could not ascertain. They certainly became no more to him than other women and children of the pueblo.

At the same time no disgrace attaches to the condition of the mujerado. He is protected and supported by the pueblo, is held in some sort of honor, and need not work unless he chooses. Men, however, do not associate with him, but this is more in accordance with his wishes and inclinations than from any desire on their part to avoid him.

Indeed, his endeavor seems to be to assimilate himself as much as possible to the female sex, and to get rid as far as may be of all the attributes, mental and physical, of manhood. Nevertheless, the condition is one which is, I believe, forced upon him by the power of tradition, custom and public opinion, and which-recognizing the impossibility of escape—he assumes probably with reluctance in the first instance, but eventually with entire complaisance and assent.

I could not ascertain, with any degree of certainty, whether the mujerados were public property for pederastic purposes at any other times than at the annual orgies, but I am inclined to think that the chiefs or some of them have the right so to employ them, and that they

do avail themselves of the privilege. They avoided all reference to the subject, and professed the most complete ignorance of the matter when I questioned them directly thereon. The old chief, however, who acted as my escort, while not disposed to be communicative, was not altogether reticent on this point, and admitted, by unmistakable signs and with perfect equanimity, that he himself, in his younger days, had made use of the *mujerado* of his pueblo in the manner referred to.

The difference between the *mujerados* and the *enares*, as Herodotus calls them, of the Scythians, consists chiefly in the fact that the deprivation of virility is intentionally produced for a specific purpose in the Pueblo cases, while in the Scythians it is the incidental result of customs and other factors which exist among the people. As a whole, I am quite sure that it is in both instances due to causes of similar character.

The Pueblo Indians appear to recognize the influence of horseback riding as an efficient aid in their process for making a mujerado. It is certainly true, as I know from my own observations, that the nomadic American Indians, who are the representatives of the Scythians on the Western Continent, especially the Apaches and Navajos, possess small generative organs and limited sexual desire and power. From their very infancy they are accustomed to the use of the horse for going even the shortest distances. They rarely walk unless to the places where their horses are hitched, and they keep them generally within arm's reach; I have seen

them mount a horse to ride twenty-five feet to get the saddle; one of the consequences of this practice is the arrest of development in the muscles of the lower extremities, their thighs are attenuated and their calves are as flat as the hand. They are entirely incapable of long foot marches.

While I have no statistics or very definite information on the subject, I am quite sure that impotence is common among them. I have often, when they had ascertained that I was a "medicine man," had young and apparently otherwise vigorous and healthy men beg me to give them some "strong medicine" to restore their virile power, and I am aware that the major part of the "pow-wowings" of their own "medicine men" is undertaken for the same purpose. An Apache or Navajo woman with more than two or three children would be a curiosity among them.

I have already spoken of the probable object had in mind in the creation of the *mujerados*. It is not at all improbable that the subjects of the "Disease of the Scythians" have from the earliest period been used for a like purpose. Bouhier * asserts that they are the passive agents in pederasty, and that, therefore, they correspond to the *pathici* of the ancients, and, I may add, to the *mujerados* of the Pueblo Indians. A like view is held by Rosenbaum, † who regards the disease as also being produced by the practice in question, which is at

^{* &}quot;Recherches et dissertations sur Hérodote," Dijon, 1746, p. 240.

^{† &}quot;Geschichte der Lustseuche," Halle, 1837. t. 1, p. 141.

the same time therefore cause and effect. Interesting and important data relative to the mental and physical changes in the organism which result from this vice are given by Tardieu,* Legrand du Saulle,† Moreau‡ (de Tours), Godard,§ and other writers on sexual aberration, and the question is also discussed in its relations to impotence in the immediately preceding chapters of the present work.

Certain medicines have the power of lessening or destroying the sexual power of the individual to whom they are administered. Among them, and, according to some authors, one of the most efficient in this direction, is iodine and its compounds.

Iodine is usually given in the form of the iodide of potassium, and very often has to be continued for long periods and in extremely large doses. But the pure drug is not infrequently administered in the form of Lugol's solution, by inhalation of the vapor or by absorption through the skin.

Roubaud states that, having given the vapor of iodine by inhalation in the treatment of phthisis, he has observed four cases of impotence, with more or less atrophy of the testicles, supervening during or immediately after the treatment. In one of these cases, not-

withstanding the impossibility of erection, the venereal desire remained; and the testicles preserved almost their normal volume in the instances of the three others, in which there was very decided atrophy of the testicles; the sexual indifference was well marked, they had neither desire nor power, and they only sought medical advice in order to be able to perform their marital duties or to have children.

The iodide of potassium is not so powerful an agent as the uncombined drug in producing impotence and atrophy of the testicles; nevertheless, there is no doubt of its power in this respect. Roland* cites two cases in which its influence was very distinctly manifested.

In a debate which took place before the Academy of Medicine of Paris, Rilliet asserted that the effect of iodine and its compounds, when long continued, was to cause atrophy of the mammary glands in females and of the testicles in males. This, however, was denied by Ricord, Piorry, Velpeau and others. Probably few physicians have administered the iodide of potassium in larger doses and for longer periods than have I, and yet I have never known it to produce either of the accidents mentioned. I have, however, often observed a diminution of both the sexual desire and the power while the medicine was being administered, but these effects disappeared soon after the administration of the remedy was stopped.

^{* &}quot;Etude medico-legale sur les attentats aux mœurs," 7th edition, Paris, 1878.

^{+ &}quot;Traité de médecine legale," Paris, 1874.

t "Des aberrations du sens genesique," 2d edition, Paris, 1880.

^{§ &}quot;Egypt et Palestine," Paris, 1867.

[&]quot;Traite de l'impuissance," etc., Paris, 1876, p. 244.

^{* &}quot;Bulletin de l'Académie Impériale de Médecine," t. xxv. 185; 1860; p. 382, et seq.

Nitrate of potash, though not, so far as I know, causing atrophy of the genital organs, is certainly a powerful anaphrodisiac, and when given for a long time to persons in good sexual health may abolish both the desire and the power of the individual. Having employed it several years ago in a case of satyriasis, in consequence of its use being recommended by MM. Grimaud de Caux and Martin Saint-Ange, I was not greatly surprised to see the effect in causing sexual impotence to two male patients to whom I gave it during a continuous period of six months for epilepsy. The case cited by the authors named is an instructive one, and the description will bear translation into English.

"A musician, of athletic build and florid complexion, and of an emotional temperament, was so urged by amorous desires that the sexual act, although repeated several times in the course of a few hours, did not suffice to cool his ardor. Hateful to himself, he feared the chastisement which divine anger inflicts on those who devote themselves to a life of voluptuousness, and came to ask my help. I bled him, subjected him to a course of cooling and calming medicine, and imposed a light diet, from all of which he received no benefit. My advice then was that he should marry, and he espoused a strong, robust daughter of a villager. At first he appeared to be better, but in a short time his wife suffered so greatly from his repeated embraces that he returned to his former course of life. Coming to me for further

relief I advised fasting and prayer, but these proving equally unsuccessful, he desired castration. This, however, I was unwilling to perform; but he was very anxious for the operation, and sought to gain, by presents, the consent and approval of those who opposed his wishes. He promised a horse that could amble beautifully, and whose value was not to be disdained, if I would accede to his wishes.

"I declare that my servants—not knowing the nature of his wish, and unacquainted with his satyr-like performances—have often made me blush when they would request me to do as the poor man wished. Little did they suspect that he wanted me to cut out the organs that made him a man.

"In thinking of the means that might cure this musician, I recollected that I had heard the illustrious Prevatius say that he had with nitre cured a man who suffered with nephritic pains due to the presence of a calculus. The patient was cured, but he became incapable of enjoying the pleasure of love. I resolved to make use of this remedy, so morning and night I gave him nitre dissolved in eau de nymphæa. The use of this salt for eight days reduced him to such a state of indifference, that he hardly sufficed for the wants of his wife."*

In the instances in my own practice to which I have referred, the use of fifteen grains of nitrate of potash

^{*} Cited by MM. Grimaud de Caux and Martin Saint-Ange, from Baldassar Timeus. Cas Med., Lib iii., Salacitas nitro curata.

three times a day produced a gradual loss of sexual desire and power in both patients which at the end of a month was complete. It was nearly a year after the cessation of the administration of the drug before the normal condition was regained.

Alcoholic liquors, if taken very sparingly, perhaps exercise a stimulating influence over the genesic function, but if very moderate limits be exceeded the result is impotence of a more or less permanent and profound character, according to the extent of the excess.

Generally the desires and power both diminish or entirely fade away, but in some cases desire remains without the ability to accomplish the sexual act in an entirely satisfactory manner. Either erections fail altogether and intromission becomes impossible, or there are imperfect erections and premature emissions. Intercourse attempted during a state of intoxication is scarcely ever performed in a normal manner, and the individual, after a period of alcoholic indulgence, is generally incapable of physiological copulation for several days thereafter. Repeated and long continued acts of dissipation may often lead to absolute and permanent loss of the ability to have intercourse. In many of these cases the venereal appetite is not abated; on the contrary it may be notably increased, and then the individual, not being able to satisfy himself in a legitimate way, resorts to masturbation, which he performs with a vehemence and frequency almost amounting to fury. I have seen a great many habitual drunkards, but never

one in whose case the investigation was made who was not a masturbator and sexually impotent.

Most physicians whose practice is largely in the direction of diseases of the nervous system have noticed the decided influence of the bromides in causing a loss of virile power. In cases of epilepsy some one of the bromide salts is given often for several years without interruption, and it is almost invariably the case that after a few months the desire and power begin to become less. Occasionally the effects are permanent, but usually when the administration of the drug has ceased the normal state returns, especially if proper remedies be given. In one case under my charge there was atrophy of the penis and testicles. When this condition ensues a restoration is impossible.

There are other remedies and some substances used as food which are said to have the power of causing diminished sexual power, but the reputation rests, I think, on insufficient evidence. Among the former, however, may be mentioned *lead*, antimony, arsenic, sulphide of carbon, conium, camphor, and many others. Some of these, notably conium and camphor, have the effect of moderating the reflex excitability of the reproductive system, but they in no sense cause impotence.

Among the substances used as food, *lettuce*, *sorrel*, *cucumbers*, and *parsley* are said by some to have an anaphrodisiac property, but I have never observed anything in their action to lead me to accept this view of their influence.

Castration.—It might reasonably be supposed that the operation of castration, by depriving a man of the glands which secrete the semen, would invariably render him incapable of sexual intercourse, but, as a matter of fact, such is by no means the certain effect of the procedure. Of course the removal always renders the individual sterile, but this is a very different thing, relating as it does solely to the taking away of the power to procreate children. The women of ancient Rome were well acquainted with the sexual power sometimes possessed by eunuchs, and knowing them to be sterile, knew also that they could make use of them to satisfy their libidinous desires without much fear of detection. Indeed, so well is the fact of their occasional virile power known in Egypt and other countries in which eunuchs are made, that not infrequently the whole generative apparatus is amputated, in order to prevent the possibility of sexual intercourse being performed.

Mental causes.—There are certain mental causes of a failure of sexual power which are among the most influential of all for the time being, but which, in general, are not difficult to manage, inasmuch as they do not depend upon any physical disorder. Among these are the following:

Excessive desire.—This is a not infrequent cause with the newly married man who finds himself utterly unable to obtain an erection, notwithstanding the fact of the strong desire by which he is actuated. In the intervals of his attempts his erections are not wanting in vigor, but as soon as he endeavors to avail himself of his rights the penis becomes flaccid and intromission is an impossibility. Frequently a feeling of anxiety or doubt arises in the mind relative to the success of the act, and this adds greatly to the probability of an unfavorable result. John Hunter,* in referring to this influence, cites the following case:

"A gentleman told me that he had lost his virility. After about an hour's investigation of the case, I made out the following facts: That he had at unnecessary times strong erections, which showed that he had naturally this power; that the erections were accompanied with desire, which are all the natural powers wanted; but that there was still a defect somewhere, which I supposed to be from the mind. I inquired if all women were alike to him. His answer was no. Some women he could have connection with as well as ever. This brought the defect, whatever it was, into smaller compass, and it appeared that there was but one woman that produced this inability, and that it arose from a desire to perform the act with this woman, and which desire produced in the mind a doubt or fear of the want of success, which was the cause of the inability of performing the act. As this arose entirely from the state of the mind, produced by a particular circumstance, the mind was to be applied to for the cure, and I told him that he might be cured if he could perfectly rely upon his own power of self-denial. When I explained what

^{* &}quot;A Treatise on the Venereal Diseases," Phila., 1859, p. 261.