

modern inventions; the prizes in most forms of auto-modern contests being adjudged to individual victors. There were, to be sure, certain games among Grecian youth in which "sides" strove with each other; and, in the knightly tournaments, squadron charged squadron in the lists; but these, like the ancient foot-ball and hockey games, in which parish fought against parish, were rather mass than team contests, since the sides were at best only rudely organized, and there was little or no division of labor among the contestants. Team athletics, I repeat, have reached their highest development in cricket, base-ball, foot-ball and rowing, in comparison with which the class exercises of the Swedes and Germans, which oftentimes involve the simultaneous action of large numbers of persons, are unspecialized.

As regards length of days, British sports come next to the Grecian games, even if we do not venture, as does Hodgetts, to date them from the games of the Aesir in Valhalla. The tournaments and jousts of the Middle Age lasted scarcely 400 years; German turning took its rise in the last quarter of the last century; Swedish gymnastics have not reached their ninetieth birthday; but the history of the Grecian games extends over nearly 1400 years, from the days of Homer, if there were a Homer, till 394 A. D., the date assigned to the last celebration of the Olympic games.

In the breadth and sanity of its aims; in the magnitude of its proportions and the completeness of its development, as a national institution; in the perfection of its organization; in the splendor and solemnity of its festivals; in its many-sided and abiding influence; as well as in the length of its history and the brilliancy of its record, the physical training of the Greeks has no parallel. Its history forms a coherent whole, presenting well-marked phases of growth, culmination and decay, and reflects at every stage the spirit of the nation. Athletic contests entered into the worship of Greek gods and heroes; and the lapse of time was reckoned in Olympiads to mark the recurrence of the principal sacred games. Gymnastics were assigned an enlarged and honorable place in the training, for peace and war, of every free-born boy and youth. The codes of Lycurgus and Solon provided for the organization and regulation of bodily training, and the management of it, during its best estate, afforded positions of honor and emolument to distinguished and ambitious men. It furnished themes for poets, philosophers and historians; sculptors and painters sought the palaestra and gymnasium for their fairest models; and even the greatest of Greek physicians thought it no condescension to study and adopt exercises and procedures which had been originated by paidotribes and gymnasts.

(To be continued.)

THE efforts of the Rhode Island Board of Agriculture to stamp out tuberculosis in the dairy herds of that State are made under the authority of a statute recently enacted, which provides that the State shall pay for animals condemned and killed. This provision encourages the farmers to point out the tuberculous cows in their herds for the information of the board. Thus far the board has killed fifteen cows, and thirty-four more are in quarantine and under observation. Diseased animals have been found in four or five towns, and milk from the herds in which they were discovered has been sold in Providence.

## Original Articles.

### NOTES ON THE EXPERIENCE OF PHYSICIANS IN BOSTON AS REGARDS THE QUESTION OF OÖPHORECTOMY FOR NERVOUS SYMPTOMS.<sup>1</sup>

BY JAMES JACKSON PUTNAM, M.D.

As the problems suggested by the question before us are mainly clinical, I have thought that the best contribution I could make, would be by collecting the unpublished cases occurring in the practice of Boston surgeons, and indicating their opinions so far as possible.

With this intention I sent around a circular asking for cases of oöphorectomy done principally on account of general nervous symptoms.

If the circular had been more liberally worded it might have called out a larger number of cases, but the fact that the great majority of the gynecologists of the city answered that they had had no experience of the sort indicated, is of decided interest as showing the general estimation in which the profession in Boston holds the operation for the removal of normal ovaries on account of nervous symptoms, or even of diseased ovaries, except in response to distinct local indications.

It is certainly true that with our increased and increasing knowledge of neurasthenia and allied nervous states and their treatment, there has grown up a distrust of the theory of specific reflex causes and of royal roads to cure, a distrust well indicated by the approval with which Dr. Goodell's widely-read paper of two years ago was received.<sup>2</sup>

But we should not for the sake of the greater overlook the less. The conservative view seems to be the one which it is important to press upon general acceptance, but we should not forget the facts that make for the other side, and the group of cases here collected furnish some of these facts. It seemed to me a lack in Dr. Goodell's paper, that he did not sufficiently recognize that the causes of neurasthenia are apt to be multiple, and that peripheral irritations, though rarely the chief cause, may count for a good deal.

It is not always possible to estimate the share that a peripheral irritation has in making neurasthenic tendencies manifest; it is not always possible to treat the case under the general conditions necessary for success: finally there are nervous systems which are not easily reached by other treatment, but can be given a new tone by some striking influence. Perhaps for some of these, hypnotism or some other form of treatment by suggestion would do as much good as oöphorectomy. In two of Dr. Johnson's cases, for example, the patient improved a good deal, though only a mock operation was done.<sup>3</sup> But the physician must use his most conscientious and enlightened judgment in each case, not forgetting that each patient stands for herself and not for an average.

Finally, we should not permit ourselves to be too much controlled by sentimental considerations in deal-

<sup>1</sup> Read at the recent Congress in Washington, as part of the discussion of Dr. Lusk's paper. See page 409, 1891, of the Journal; with a few subsequent additions.

<sup>2</sup> Medical News, 1889, vol. iv.

<sup>3</sup> Compare "The Curative Effect of Operations, *per se*" by J. W. White, *Annals of Surgery*, August, 1891. One of Dr. Johnson's two patients was informed that the operation had not been completed, and yet the favorable result occurred.

ing with the question of "unsexing" the patient. The function of child-bearing is not the only or most sacred function of every woman.

I have reports of twenty-six cases of oöphorectomy. Eleven of them were contributed by Dr. F. W. Johnson; eight by Dr. John Homans; five by Dr. J. W. Elliot, two of the latter being also under my care; one by Dr. E. W. Cushing; and one by Dr. J. R. Barss. Three of these had been published, but are reported again on account of later histories. Eleven of the patients appeared to have been benefited by the operation; thirteen were not benefited;<sup>4</sup> two died of some other cause rather too soon to make it worth while to include their cases.

This proportion of eleven favorable to thirteen unfavorable cases is, of course, of no statistical value, for we all know of cases enough where ovariectomy has been done in patients where nervous symptoms were present, though not on account of these nervous symptoms and without benefiting them.

Unfavorable results of serious character followed the operation in three cases, although in a number of others the nervous symptoms were temporarily worse, or symptoms like those frequently attending the menopause were induced. Of the three unfavorable results, two consisted in maniacal outbreaks of temporary duration, and one in an increase in the number of epileptic attacks. The operation in this case, however, was done only four months ago.

Dr. A. T. Cabot has told me of two other cases occurring in his practice where ovariectomy, which was not done for the sake of nervous symptoms, was followed, in one case by melancholia of many months' duration, and in the other by a shorter attack of mania, which ended in death on the third day. In this case the patient had shown delusions and other mental symptoms before the operation.

As such conditions occasionally follow other operations, though especially those on the genital tract, it would be hardly fair to attribute them to the loss of the ovaries in itself.

In three other cases of the group here presented, insanity came on a longer or a shorter time after the operation. It was, however, afterward learned, that mental symptoms had been present before the operation in every case.

In one of Dr. Homans's cases adhesions within the peritoneal cavity, consecutive to the operation, seemed to be the cause of considerable pain, which was increased by walking. After about a year the patient had a sudden sensation as of something giving way, and after the soreness subsided she was able to walk better.

In all the cases except one there were some signs or symptoms to call attention to the pelvic organs, and yet no such condition was present there as would have furnished sufficient surgical reason for operation.

The symptoms of chief importance were either of neurasthenic or hysterical character, or consisted in dysmenorrhœa and local pains,—local, but probably on a basis of the irritable weakness that we call neu-

rasthenia. In three cases the treatment of uterine displacement, which had been previously impracticable, was made possible by the operation on the ovaries.

The majority of the ovaries and tubes were either perfectly healthy, although the nucleus for a certain amount of peritonitis, generally with adhesions, or they were somewhat enlarged, or more dense than usual, or the seat of retention cysts or dilated follicles, conditions liable, perhaps, to give rise to pain at menstrual periods,<sup>5</sup> but not likely to be important causes of serious symptoms except in the presence of a neurotic taint.

In some of the cases of this class it seemed almost certainly the bringing on of the menopause which induced the favorable result. It is this view which has been held to afford a justification for the occasional removal of ovaries which would be called strictly normal; and objectionable as it is to do this, if they are still capable of producing ova, yet it cannot be stigmatized as being absolutely unjustifiable or incapable of having a good effect.

The eight cases in which well-marked improvement occurred were briefly as follows. It should be said that the operation in one of them was done only six months ago, and in another only ten months ago, so that in these cases, and possibly in some of the others, the nervous derangement, hitherto latent, may reassert itself.

CASE I. This was the case of a young woman of eighteen, the youngest on the list. The operation was done by Dr. Homans, and the case—a very important one—has been reported both by him<sup>6</sup> and Dr. Goldsmith.<sup>7</sup> I should not refer to it here but for the fact that Dr. Homans has kindly given me new information, which brings the history up to seven years after the operation, at which time the patient died suddenly with intense pain in the head and convulsions, having remained well until then.

It was a case of so-called moral insanity of eleven years' standing, with outbreaks, especially at the menstrual period, of extreme violence. She was intelligent, but at times utterly uncontrollable and had been the inmate of several asylums, in one or another of which she seemed likely to spend her life. The improvement after the operation was so great that she went home to live, and after a time was able to support herself, which she continued to do until her death.

Dr. Johnson has also operated on a patient of eighteen, one of twins, with undeveloped uterus, who was neurasthenic and childlike. I do not count this case on the positive side, because the improvement did not begin for three years, though there are several reasons for attributing it to the operation, but the case is of interest because the patient developed physically and mentally, and from being childlike in appearance, manner and interest became more womanly and mature. There was a marked gain in flesh, as often occurs.

CASE II (Dr. Johnson). Single, thirty-one years old. Symptoms: Dysmenorrhœa; pain in left ovarian re-

<sup>4</sup> Since this was written Dr. J. W. Elliot has given me a later and more favorable report on a case previously classed as unrelieved. The patient was a woman of about thirty, of strongly neurotic and uncontrolled temperament. She had suffered much from dysmenorrhœa and retroversion, and from pains of every sort, and had become demoralized by morphine. A private letter of the date of December 4, 1891, says, "The patient upon whom you operated gained a little during the first six months. Thereafter she lost somewhat in a general way, but for the last ten months has been as well as anybody. She is able to walk, eat and sleep well, and to grow stout."

<sup>5</sup> Dr. Johnson's opinion, after a careful study of his cases, is that severe dysmenorrhœa usually implies some degree of pathological change either in the uterus or ovaries, though not necessarily a high degree. Dr. W. F. Whitney, who has had a large experience in the examinations of these specimens, is quoted as saying (Boston Medical and Surgical Journal, 1891, vol. xxiv, No. 2, p. 34), with relation to "retention cysts" "the association of retention cysts with painful menstruation, certainly seems more frequent than mere accident would seem to warrant."

<sup>6</sup> Three Hundred Laparotomies for Various Diseases: Boston, 1887.  
<sup>7</sup> A Case of Moral Insanity: American Journal of Insanity, October, 1883.

gion, generally of burning character; constipation; increased frequency of micturition; general neurasthenic condition.

Physical diagnosis: Retroflexion, with disease of left ovary and tube.

Family and personal history: There had been phthisis and insanity in the family, and the patient herself had suffered from hip-disease from her seventh to her eleventh year.

Operation, November, 1887: removal of left ovary and tube, both of which were adherent. The right ovary was left behind, although it seemed larger than normal.

Pathological examination (Dr. W. F. Whitney): Chronic peritonitis, but the tube and ovary substantially normal.

Subsequent history: Gradual but important gain as regards nervous symptoms. A year and a half ago the patient married, and has had a child. She is now doing well in every respect, and has gained forty or fifty pounds in weight. The pain and head symptoms were relieved.

CASE III (Dr. Johnson). Single, twenty-nine years old.

Symptoms: Severe dysmenorrhœa for three years past with general nervous exhaustion. When seen by Dr. Johnson she had headaches, pain in the back, morning fatigue, constipation and other signs of nervous weakness. She had attacks of hystero-epileptic character in which she would lose the use of her lips, and had lost consciousness, each attack being followed by prostration of three days' duration. The family history showed that phthisis had been prevalent, and that there had also been family worries.

Operation, January 31, 1888: Removal of both ovaries and tubes.

Pathological diagnosis (Dr. W. F. Whitney): Thickening of the peritoneal sheath, with retention cysts, and dropsical condition of numerous follicles.

Result: After the operation, symptoms of maniacal excitement. The hystero-epileptic attacks have never returned. Finally, gradual improvement. After two years the patient was able to return to work. On the whole, there has been great improvement, but not complete recovery. The patient has not been heard from of late.

CASE IV (Dr. Johnson). Single, thirty-eight years old.

Symptoms: Four years ago nervous prostration; never very strong; a school-teacher by profession. She came to Dr. Johnson complaining of intense pain in the left leg and thigh, shooting up from the sole of the foot the whole length of the leg and thigh, the pain being increased by coughing and laughing, also by a movement of the bowels; very neurasthenic; very constipated.

Physical diagnosis: Retroversion, with probable affection of the left tube and ovary. Every sort of treatment was thoroughly tried from July, 1887, to November, 1887, without improvement. Was seen in consultation by Dr. S. G. Webber, who recommended operation, which was done.

Operation, November 23, 1887: Both ovaries and tubes removed.

Pathological diagnosis: Chronic peritonitis, but tubes and ovaries healthy. After the operation the uterus stayed in its proper position.

Subsequent history: April 15, 1888, the patient re-

ported by letter that she was getting on very nicely, and only suffered from general nervousness. Her spirits, which had been very much depressed before the operation, had greatly improved. Somewhat later she wrote that she was constantly gay and lively. She gained thirty pounds in weight in five months. On June 23d, of the same year, the sciatic pain was reported as still present (felt in the sacral region and running down the leg, but only when standing). Since then she has reported that she has completely recovered, and has gone back to teaching school. Would not be known for the same person.

CASE V (Dr. Johnson). Married, twenty-six years old.

Symptoms: Intense headaches of neurasthenic character, with some other neurasthenic symptoms, and dragging sensation about the pelvis.

Family and personal history: Phthisical tendencies; father extremely nervous. The patient had had headaches even as a child, had been married four years, and had two children.

Physical diagnosis: Retroflexion, and small fibroid in the posterior wall of uterus; laceration of cervix; ruptured perineum. She had had an operation for the cervix and perineum, at Denver, but found only temporary relief, and no relief from the headaches. Dr. Johnson had her eyes and pharynx thoroughly examined and treated, as possible causes of the headaches. There was some improvement, but the symptoms soon returned. She had her teeth pulled, without relief. Was seen in consultation by Dr. S. G. Webber. The retroflexion was overcome by packing, which relieved the backache so that she was able to walk without pain.

Operation, finally, on the twelfth of November, 1890. Both ovaries and tubes were removed.

Pathological diagnosis: Tubes normal, and ovaries practically so (Dr. W. F. Whitney).

Results: At first she lost ground in all respects. The headaches and backaches increased: she lost flesh and strength. Her husband became frightened, and thought she would go insane; but in three or four weeks she began to improve, and now she is better in every respect and is able to ride a bicycle.

CASE VI (Dr. Johnson). Single, twenty-seven years old.

Symptoms: A neurotic patient, Jewish by race, and of a neurotic family. She was a brilliant person, but had suffered from migraine since childhood, as her mother had before her. She was a good student. The headaches increased in frequency, and finally were of almost daily occurrence. Dysmenorrhœa was so bad that an immense amount of morphine was used from time to time, and insanity was feared. Dr. Myles Standish examined her eyes, and found insufficiency of some of the ocular muscles, and operated, securing relief for two weeks only. She was then seen in consultation by Dr. W. N. Bullard, who advised removal of tubes and ovaries. The only physical sign of consequence was tenderness in the neighborhood of the left ovary.

Operation, April, 1891: Left tube and ovary adherent. Both tubes and ovaries removed.

Pathological diagnosis: "Very little found that could be called pathological" (Dr. W. F. Whitney).

Results: The night after the operation the patient had a hystero-epileptic attack with opisthotonos, lasting for six hours. Six weeks later she wrote: "I am

feeling very well, only two or three headaches, and these lasted only a day and a night. This is such a change from the headaches of six days' duration that I am much pleased. I have gained rapidly, and am much stronger than I expected to be at the end of six months." The local symptoms in this case were very slight.

The patient was last seen by Dr. Johnson on October 28th, six months after the operation. She had then gained nine pounds in weight, walked three miles a day, and had had no return of the hystero-epilepsy. She has a sick headache once a week, which is relieved by phenacetine, but the former attacks of pain in the head recurred only five times. Her general health is better.

CASE VII (Dr. Homans). Mrs. S., thirty-five, one child.

Symptoms: Pain in the left side of pelvis, offensive discharge. The patient was pale and worn-looking. She had nervous prostration when eighteen, and got into the morphine habit. One ovary prolapsed and tender.

Operation, June 23, 1889: Ovaries somewhat atrophied, but otherwise normal.

Result: Marked gain in flesh and strength and general tone. Menstruation continued, and became more frequent. She gave up the morphine habit.

CASE VIII (Drs. J. J. Putnam and J. W. Elliot).

Miss P., thirty years old. Health delicate since childhood; for two years constant headaches; sleeplessness, with bad dreams; sense of weariness, and aching of the limbs and whole body; very readily fatigued; dysmenorrhœa and irritability of the bladder. The patient's sister is moderately neurasthenic.

Physical diagnosis: Uterus enlarged, retroverted and tender; ovaries enlarged, tender and prolapsed. Every means of improving the general vigor was tried that the patient's means permitted; and as the uterine condition was a source of great distress, careful, but unavailing, attempts were made to correct this also. Finally, in April, 1885, both ovaries and tubes were removed by Dr. Elliot. The ovaries were enlarged and very hard, and were pronounced by Dr. W. W. Gannett to show signs of commencing cystomata.

Result: Continuation of the headache for three months or more, after which gradual improvement. The same may be said of the other symptoms. No return of the menses. Patient, who had been dragging herself about in great distress for nearly two years, returned to work six months after the operation; and although she has been obliged to be careful, she has improved steadily ever since, and says that she was never in such comfortable condition as since the operation. She has worked regularly and with pleasure, and supports herself. The result has been in every respect satisfactory.

CASE IX. Dr. E. W. Cushing<sup>8</sup> has reported a case of dysmenorrhœa, confirmed masturbation and melancholia, in a negress, with excellent results, which have persisted. Dr. Cushing has kindly written to me the following, under the date of October 10, 1891; for which reason I report the case here.

The ovaries, it may be said, were reported as somewhat enlarged, and one of them contained a cyst.

"In regard to the patient of whom you inquire, I am pleased to be able to state that the operation was com-

pletely justified by the results. The melancholia disappeared immediately after the operation. For several months the patient remained rather feeble, owing to her great emaciation and generally shattered condition, then she began to work as a seamstress, and later was able to do kitchen work; something over a year after the operation she came to me to know whether she might properly marry. I found that the proposed husband was a widower with several children, and that the nature of her operation had been explained to him, I therefore saw no impediment to her marriage, which accordingly took place; at last advice she was living very happily in New Brunswick, taking care of her household and her adopted children. I may add that, while the operation seemed to relieve both the melancholia and the desire for, and practice of, masturbation, it did not abolish the natural sexual feeling. In a large number of cases where the ovaries and tubes had been removed from adult women, I have never found one who felt that the operation had in any way impaired her sexual capacity or diminished what sexual desire she had had before the operation."

CASE X (Drs. C. P. Putnam and J. W. Elliot). Single, about thirty years of age. General health poor; old-hip-disease, with persistent deformity; severe dysmenorrhœa, with headaches and backache, and symptoms of excessive nervous weakness, which prevented all effort. There was no other evidence of pelvic disease, and the operation was undertaken in the hope of improving her health by relieving the dysmenorrhœa,<sup>9</sup> all other feasible means having been used without success. Both ovaries were removed, although healthy, on September 20, 1890.

The patient was seen by me, October 20, 1891, and reported as follows: "She has less headache, and is very much less nervous, and, on the whole, she feels much more natural and better. Her strength is feeble and she still sleeps poorly, but this has always been the case. Up to last September she continued to have severe abdominal pains, though not constantly, coming on especially after fatigue, and occasionally shooting down the thigh. In August she had one of these attacks, but none since then. 'Hot flashes' have occurred ever since the operation, especially after fatigue. She has not been able to work much since the operation, on account of lack of strength; but on the whole, she can do more than before, and is not hindered from working by general nervousness. There has been no return of catamenia."

CASE XI. I can report the result at the end of five years, in an interesting case operated on by Dr. J. Richmond Barss, of Malden, under whose care the patient had previously been, and communicated by Dr. G. L. Walton to the American Neurological Association on June 20, 1884,<sup>10</sup> six months after the operation.

In brief, the case was that of a single woman, twenty-nine years old, without neurotic inheritance. She had suffered ever since puberty with dysmenorrhœa and backache. For two years she had been confined to the house, and for a good part of one year to her bed. She had become excessively weak and nervous, and was subject to frequently recurring convulsive attacks without either loss of consciousness or the usual signs of typical hystero-epileptic seizures.

Dr. Walton, who was called in consultation, found a well-marked hemi-anæsthesia, and signs of extreme irritable weakness of the nervous centres, besides great

<sup>9</sup> I have not undertaken to collect all the cases where dysmenorrhœa furnished the sole reason for the operation. A number of such cases have occurred.

<sup>10</sup> Journal of Nervous and Mental Disease, vol. xi, July, 1884.

<sup>8</sup> Journal American Medical Association, Chicago, 1887.

ovarian tenderness. The ovaries were found full of small cysts,<sup>11</sup> but not materially enlarged.

Dr. Barss writes, under the date of October 20, 1891: "In 1889, five years after operation, she was remarkably well for her, and was earning her living at sewing, could walk quite good distances. Previous to the operation she was practically confined to the house for two years, one of which was mostly spent in bed. Her tubes were not removed, and she flowed for several months more than she ever did before. I should say it was a year before we began to see *marked* improvement. To my mind her case was very satisfactory."

Besides these hitherto unpublished cases, Dr. Homans has recorded four,<sup>12</sup> in none of which material or permanent improvement occurred.

Dr. Elliot suggests one reason for doing oöphorectomy, which is, of course, familiar to gynecologists, but not so much so to the general practitioner; that is, that, by inducing the menopause and uterine involution, it may secure the disappearance of painful and wearing uterine affections not to be treated successfully in any other way, without inducing an amount of fatigue and depression which in the case of many debilitated and neurasthenic patients, would overbalance the benefit received. Of course, in many such cases a thorough treatment of the underlying nervous state might render gynecological treatment unnecessary.

Finally, I have a case of male castration to report. The patient was not under my care when the operation was done, but the case has never, to my knowledge, been published.

The patient is now a man of forty-one. He has been unbalanced all his life, and especially so since a severe blow on the head in childhood. The operation was performed three years ago. For some years previous he had been a dipsomaniac, and excessively and openly erotic; and for a time it had been necessary to confine him in an asylum.

The castration was done at his own urgent desire. His friends confirm the statement that he makes, that his mental condition improved to a marked extent. He is at present unreliable and suspicious to a considerable degree; but his desire for liquor and his erotic tendencies have been absent since the operation, and his disposition has been quieter, so that he is able to live alone and take care of himself, though requiring more or less supervision.

In conclusion, I do not claim that the favorable results reported for these cases could not have been brought about in some other manner, but only that they were, or seem to have been, brought about in the way described, and that the patients are not reported as regretting the operation.

The following opinion seems to me the most reasonable:

When ovarian or uterine disease of slight or moderate amount is associated with marked nervous symptoms, whether these are of the nature of unusual local pain or of a more general character, it is rarely the case that the local disease is alone at fault, and the physician should look carefully for other signs of the main trouble in the nervous system itself. It is so often found, in practice, that by invigorating the gen-

eral nervous condition the patient can be made comparatively insensitive to local irritations, that, before deciding on a step which may lead to bitter regret and disappointment, or to more or less persistent nervous symptoms of the former, or of a new type, the physician should omit no other means for accomplishing his aim, which study, determination and skill can secure; and even if he fails he should remember that his chance of success through oöphorectomy is not of the best. It should be especially borne in mind that the elements of personal temperament and personal influence play an important part in the treatment of neurasthenia and mental disorders, so that some new physician may succeed where many have failed, or that every one may do better than he believed possible, if he chooses the best method and relies upon it with sufficient persistence. It is certainly true that neither the patient nor the physician is likely to devote the necessary determination and zeal to the general treatment, if the possibility of a more speedy cure by operation is kept looming in the background. In the minds of both of them the treatment selected should be for the time the only treatment.

"When half-gods go, the gods arrive."

The new light which the investigations into hypnotism and kindred subjects have thrown upon the pathology and therapeutics of the nervous system, indicate that when oöphorectomy cures neurasthenia, it sometimes does so by so-called "suggestion," that is, by influencing cerebral processes not ordinarily concerned in active consciousness,<sup>13</sup> but having a great deal to do with the nutrition, sensitiveness to pain, and the like, and there is always room for hope that some other and less objectionable means can be found of exerting this influence. It is probable that electricity and the "rest-cure," as well as hypnotism, act often in this way.

All this the physician should conscientiously say to himself, but, having done so, he should with equal conscientiousness recall the cases in which oöphorectomy was the agent that restored the wished for health, and should look upon it as another and valuable string to his bow, though one of only occasional utility.

As regards the kind of cases in which oöphorectomy seems most justifiable — apart from considerations of non-medical character — it is doubtless true that the serious, typical neuroses, and especially epilepsy, are rarely benefited, and the less so in proportion as the symptoms are of definite character and independent in origin of the pelvic disease. The mere fact that nervous symptoms are worse at or near the the menstrual period, by no means necessitates the conclusion that there is any important causal connection between the two series of events.

On the other hand, it would be incorrect to conclude that because a woman has neurasthenia or hysteria, even if they be on an hereditary basis, and wholly independent in origin of pelvic irritation, it is therefore impossible that the removal of such irritation, or the induction of a premature menopause, could be a means of cure. This may not happen often, but such cases as Case I of this series, shows that it does happen occasionally.

THE German Government is to establish a modern, well-equipped biologic station on Heligoland.

<sup>11</sup> See the opinion quoted from Dr. Whitney (above) as to the relation between retention cysts and dysmenorrhea.

<sup>12</sup> *Laparotomies*, Boston, 1887.

<sup>13</sup> Compare Association Neuroses, Morton Prince, M.D.