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PRODUCTION OF SEX AT WILL.

WE have had placed in our hands a series of letters upon the production of a desired sex, written to a scientific gentleman of this city, by Mr. D. D. Fiquet, of Houston, Texas, a graduate of the Harvard Law School, whose failing health drove him from the bar to a business in the open air, and who is at present a practical cattle-breeder.

In these letters Mr. Fiquet claims to have discovered a system by means of which, with unerring certainty, he can cause a cow to give birth either to a bull or a heifer calf, according to his wish. He developed his system at the cost of much previous experiment and many failures in his attempts "to discover the causes which control and the conditions which determine the matter of sex."

He made use of all available scientific authorities of note, discarding them one by one as he proved their fallacies. In this way he disposed of Thury's law, which, says Mr. Fiquet, "is utterly worthless in practice and wrong in theory. It is flatly contradicted by the ordinary experience of stock-raising."

Being impressed by Waldeyer's remark in his work on the ovum, namely, that for some time after impregnation the ovum is, in a certain sense, hermaphrodite, Mr. Fiquet was led to imagine that the matter of sex might perhaps be controlled and determined by the female during pregnancy. Familiar, also, with the fact that in the bee, moth, and butterfly families sex can be governed by the simple conditions of care and feeding, he resolved to try the effects of nutrition upon his cows after the act of coition. To this end he selected two animals whose condition for many months had been identical, and had them served by the bull. Having now two cows in precisely the same physical status, he fed one richly, and underfed the other. At term each cow produced a heifer. He then repeated the experiment with two other animals, treating them during their pregnancy in a similar manner. Each cow gave birth to a bull calf. Mr. Fiquet naturally abandoned this method, and, despairing of securing any aid through physiology, he "turned to nature herself."

An intimate acquaintance with the birth and death-rate statistics of life insurance had led him to remark the uniformity in the proportions of each sex. This suggested the thought that a harmless method of disturbing this uniformity of sexes at birth might be the solution of his problem. How to accomplish this was the next question.

Recalling to mind all his married acquaintance, he

made the observation, not only that in some families female children, in others male children, predominated, but likewise that a vigorous, passionate man and a cold, unimpassioned woman generally begat a surplus of female children, and that, reversing the temperaments, boys abounded. Then occurred to him the idea that if, by any means, he could render his bull more passionate than the cow at the time of coition he would thus secure the birth of the opposite sex, or heifers, and *vice versa*. Believing he could accomplish this by feeding and careful attention, he began his experiments.

Choosing eight cows, he fixed upon one from which he desired a bull calf, — the other seven were to produce heifers. Having carefully noted the dates of the periods of the eight cows, he allowed them to pass one oestrus, and thus was able to anticipate the return of the period in each. The cow destined to produce a bull calf came in first. Mr. Fiquet began to feed her most bountifully upon grain, corn, oats, meal, and rich hay. A few days before the reappearance of her period she was withdrawn from the herd, stabled, "and right royally attended. As anticipated, her passion came and in full blast." The bull, meanwhile, had been fed upon green and cooling food, which moderated the usual vigor of his passion, and the difference between the animals "was thus rendered plainly discernible."

"My theory," says Mr. Fiquet, "was that, the cow being far more desirous for the bull than was the latter for the cow, nature was calling more loudly through the female than through the male for the natural gratification of her desires; that the services of a male were more necessary than those of a female; and that, *pari passu*, the creation of a male thus became a more natural necessity than that of a female." This he supposed to be the desired disturbance of uniformity in nature, and consequently that in her very economy nature required the production of a bull calf. "Think of the theory as you may," he adds, "the cow was served by the bull twice, and the result was the desired bull calf."

The remaining seven cows were submitted to the gallantry of a castrated bull, who, although impotent, served as a never-failing detective of the periods of the cows. Mr. Fiquet was thus enabled to anticipate their seasons of heat with exactitude, and, moreover, supposed the fruitless activity of this bull would be of use in reducing the passion of the cows.

Previous to his introduction to each of these cows, the other bull was generously fed on various rich grains and clover hay. On the other hand, the several cows were kept cool by light food, — grazing, green fodder, and bran. When their periods arrived, the animals were allowed to run temporarily with the castrated bull, and their frenzy was thus partially allayed. Being finally coupled with the service-bull, the conditions in each case were a rampant bull and a moderately excited cow, — the reverse of the conditions in the first experiment. The bull therefore being more anxious for the cow than the cow for the bull, Mr. Fiquet, for reasons already given, again predicted the birth of a calf whose sex would be the opposite of

that of the more passionate animal. The result was the birth of seven heifer calves. In all these instances, then, Mr. Fiquet was successful. Continuing his experiments, he bred from five other cows, the sex of the calf in every case being correctly predetermined. The cows of several of his neighbors were served by his bull, and, having inquired as to the previous treatment and feeding of the cows, and knowing the condition of his bull, Mr. Fiquet predicted the sex of the resulting calves with unvarying correctness. "My success," he says, "is therefore either unprecedented luck at guessing and the merest fortuitous accidents, or these experiments were based upon physiological truths."

He confesses to a lack of knowledge in the methods of horse-raising, but presumes his theories will hold good in the breeding of all uniparous animals, and believes his results can be reached by any careful, systematic breeder.

He feeds and prepares his bull for every special occasion, and does not allow him to serve more than one cow per week. If the bull be in course of preparation for a particular cow, he is never permitted to serve another which chances to come previously into season. An entire month is sometimes occupied in this preparation.

Mr. Fiquet's system will oblige the owners of large herds of cattle to keep several bulls, but the ease with which they can breed either sex at will (supposing the new theory to be true) will more than compensate for the increased expense, for the growth of their herds will be rapid.

Mr. Fiquet has never used excitants of any kind, relying solely upon a generous supply of rich foods. He expects to encounter incredulity on the part of cattle-raisers, and seems to desire avoidance of discussion. He simply presents his facts, the exactness of which is formally substantiated by certificates signed by trustworthy and well-known citizens of Houston, and now in the hands of a gentleman of Boston.

Mr. Fiquet has already communicated details and results of his experiments to the *Journal of Agriculture*. In reply, a critic, without reason, we think, finds them a confirmation of Thury's law, namely, that when coition occurs in the early stages of the female's passion female offspring should be produced, the contrary if coition take place late in the period of the female. We fail to discover in what manner Mr. Fiquet's experiments prove the correctness of this theory.

The *Monthly Bulletin of the American Jersey Cattle Club* for July and August, 1879, briefly quotes the experience of Mr. Fiquet. The editor makes no direct comments, but foreshadows a shoulder-shrugging incredulity.

Having carefully read Mr. Fiquet's letters, our own impression is that he is a man of perfect sincerity. The modest manner in which he presents and details his experiments, his impersonal anxiety that practical cattle-raisers should be made familiar with his success, and the very evident absence of all wish on his part to win notoriety seem to be proved by his desire that some gentleman of scientific reputation, or some institution of influence, should call upon agriculturists

and cattle-breeders to try the experiments we have detailed.

If Mr. Fiquet be correct in his theories, and if the results he has obtained be more than mere coincidences, they will, it must be confessed, not only revolutionize cattle-raising, but add enormously to the wealth of the world.

SECOND ANNUAL REPORT OF THE CONNECTICUT BOARD OF HEALTH; SEVENTH ANNUAL REPORT OF THE BOARD OF HEALTH OF THE CITY OF NEW HAVEN.

THE second annual report of the State Board of Health of Connecticut fulfills the promise which the first report of last year led us to await. The number of correspondents of the board has steadily increased, and the zeal and interest in the work in like proportion; the registrars of the larger towns have been prompt in preparing their mortality returns, and in performing the duties assigned to them by the laws; the monthly mortality and sanitary reports have grown more and more comprehensive, and are attracting a wider circle of readers. A large number of copies of circulars on diphtheria and on the restoration of the drowned — the latter like the one issued by the State Board of Michigan — have been distributed.

The general health of the State is reported as having been for the most part satisfactory; malarial diseases have been decidedly prevalent, involving new territory at a pretty uniform rate. Malarial fevers in the Quinnipiac Valley are discussed in the special reports, among which "typho-malarial" fever is given a prominent place.

There were quite a number of refugees in Connecticut from Memphis, and in several instances the advice of the board was asked in regard to effects which had been used in connection with yellow fever cases in 1878. The goods, as recommended, remained unpacked until the winter months, when they were disinfected and aerated.

According to the report, New Haven is the only port in this country that receives whole cargoes of rags. These come for the most part from Egypt, where the principal garment of a large part of the population is a long cotton robe, and hence the abundance of cotton rags. These rags are torn up and pressed into bales at Alexandria. The danger of the importation of the Oriental plague through these rags was suggested. The same danger has existed at various times within the last twenty years, though attention has not been generally called to it. The importing companies, the report says, were conferred with, and orders given that no further collections be made from infected regions, and the National Board issued an order for the disinfection of cargoes from infected ports. The rags are imported in closely pressed bales; consequently, the danger would be where the goods are unpacked at the paper mills. No cases of sickness could be discovered among the sailors on these vessels, either at sea or in port, and reports from the manufactories in the State show that no disease has

been communicated by rags, except small-pox in a few instances from domestic rags.

Plague is preëminently a disease of extreme poverty, and we believe the danger of an epidemic outbreak among our comparatively well-fed and well-housed people would be extremely small, even were the poison imported. It is now well known that the disease is to be found pretty constantly in a more or less active form in some parts of the Persian and Ottoman dominions.

Professor Hirsch, in the report of the German commissioners on the outbreak at Wetjanka, reports a very probable case of infection with plague from clothing which had been boxed up.

In speaking of "both typhoid and enteric fevers," in one passage of the report, the secretary seems to apply these names to distinct diseases, whereas they are ordinarily regarded as synonymous. We suppose he applies the term "enteric" to what Professor Clark, of New York, would call "cess-pool fever." In addition to the secretary's report, among other interesting papers is a short one on Sickness from Impure Ice; one on Sanitary and Unsanitary Conditions of the Soil, by Professor Lindsley, the efficient health officer of New Haven; a preliminary paper by the secretary of the board on school hygiene, a subject of great importance, which is sure to attract soon the attention it deserves; and a few words on the Pollution of Streams, by Prof. W. H. Brewer. In a report to the prison commissioners on the state-prison we notice a recommendation that the *insane* criminals be treated elsewhere than in the prison. Provisions for this step were lately made by the Massachusetts board, as was mentioned in our last issue.

Of the Seventh Annual Report of the Board of Health of the City of New Haven it is sufficient to say that the same spirit animates it which is reflected in the Report of the State Board, the president and health officer of the local board being both members of the State Board.

MEDICAL NOTES.

— Dr. James Sawyer, of Birmingham, writes as follows to the *Lancet* on the transverse depressions of the nails:—

"Many years ago Professor Sanders showed me these furrows in the Edinburgh Royal Infirmary, and I have been accustomed since to look for them in the patients who have come under my care. I agree with Dr. Duckworth that there is a rather more rapid formation of nail than that of two complete growths in a year. From my own observations I should say that from three to four months are usually occupied in the passage of a furrow from the lunula to the end of the nail. These grooves are very common. They are sometimes to be seen on all the finger-nails; often they occur only on the thumb-nails. If a person's nails be free from transverse furrows we may conclude, almost with absolute certainty, that he has not had a serious illness in the last three or four

months. I have found three or four of these depressions, equidistant and parallel, on the thumb-nails of women who are the subjects of dysmenorrhœa, — a furrow marking each painful 'period.'"

NEW YORK.

— The programme of the proceedings of the American Medical Association has not yet been definitely determined upon, nor is the list of papers to be read as yet complete; but the arrangements will probably be somewhat as follows: The sessions of the general association will be held in the large hall of the Young Men's Christian Association building, at the corner of Fifth Avenue and Twenty-Third Street; the delegates being seated on the floor, and spectators in the galleries. The different sections, whose sessions will be in the afternoons, will meet in other rooms in the Association building, and also in the lecture-rooms of the College of Physicians and Surgeons, across the street; the amphitheatre being assigned to the surgical section, in order that any demonstrations which may be given can be viewed to the best advantage.

The Association will be called to order at ten o'clock on Tuesday morning, June 1st, when an address of welcome will be delivered by Professor T. Gaillard Thomas, chairman of the committee of arrangements; after which the annual address will be given by the president, Professor Lewis A. Sayre.

In the section of Practice of Medicine, the first paper on Tuesday will be by Dr. William H. Thomson, of New York, on The Classification of Medicines. On Wednesday a paper on The Therapeutics of the Natural Waters will be read by Dr. W. C. Van Bibber, of Baltimore, and one on The Strong Galvanic Current in the Treatment of Sciatica, illustrated by Cases, by Dr. V. P. Gilvey, of New York. On Thursday Dr. Leonard W. Pitkin, of New York, will read one on Epilepsy.

In the section of Surgery, on Tuesday papers will be read by Dr. Benjamin Lee, of Philadelphia, on Spinal Extension, its Modes, Means, and Motives, and by Dr. George M. Beard, of New York, on Phimosia as a Cause of Nervous Symptoms, with Results of Operations. On Wednesday Dr. C. F. Stillman, of Plainfield, New Jersey, will read a paper on Newly Devised Orthopædic Appliances, including the Seaton Splint, and Dr. James L. Little, of New York, one on Compound, Complicated Hare-Lip. On Thursday Dr. Henry G. Piffard, of New York, will make some Remarks on Lupus, illustrated by the Magic Lantern.

In the section of Obstetrics, on the first day a paper will be read by Dr. J. Marion Sims, on Batteny's Operation in Epileptiform Affections; which will be followed by one entitled The True Import of Oöphorectomy, or Spaying, for Reflex Symptoms, more particularly in Epilepsy and Catalepsy, by Dr. Montrose A. Pallen, of New York. On the second day Dr. T. Gaillard Thomas, of New York, will read a paper on Ablation of the Uterus, and Dr. William M. Polk, of New York, will read one on The So-Called Malaria of Puerperal Fever.

In the section of Ophthalmology and Otology (including Laryngology), on Tuesday, a paper on Stenosis of the Larynx will be read by Dr. W. H. Daly, of Pittsburgh, Penn., and one entitled Some Remarks on the Lesions of the Larynx in Pulmonary Phthisis, by Dr. Carl Seiler, of Philadelphia. On Wednesday, Dr. F. H. Bosworth, of New York, will read one on Bilateral Paralysis of the Abductor Muscles of the Larynx, and Dr. D. H. Goodwillie, of New York, one on The Surgical Treatment of Naso-Pharyngeal Catarrh. On Thursday a paper on The Therapeutic Value of the Galvano-Cautery in Diseases and Growths of the Nasal Pharynx will be read by Dr. W. H. Daly, of Pittsburgh.

In the section of State Medicine, a paper on the Death-Rate among the Rich and Poor, read by Dr. Drysdale, of London, will be read on the first day, and on the second day there will be papers by Dr. Joseph Jones, of New Orleans, on Hygiene and Fevers, and by Dr. E. C. Seguin, of New York, on The Psycho-Physiological Training of Idiotic Eyes.

The programme for the various public entertainments, as now determined upon, is as follows: On Tuesday evening the general reception tendered the Association by the profession in New York and their friends will be held at the Academy of Music. The parquet will be floored over, as for a ball, the music will be furnished by the Seventh Regiment band, and supper will be served by Delmonico, in Nilsson Hall adjoining. On Wednesday evening an entertainment, consisting either of a grand concert at Steinway or Chickering Hall, or of a performance at Booth's Theatre, with Edwin Booth as the principal attraction, will be given under the auspices of the committee of arrangements, the expense for which will be provided for by some of the large wholesale drug houses. On Thursday evening there will probably be a reception by Mayor Cooper at his private residence on Washington Square, at which the governor will be invited to be present; a reception at the Academy of Medicine, tendered by Professors Thomas and Barker; and receptions at Dr. Marion Sims's and other houses of medical men. On Friday, immediately upon the final adjournment of the Association, at one o'clock, the steamboat excursion provided by Mr. William Wood, the publisher, will take place, as previously announced in the JOURNAL. One feature of all the public entertainments, including that of Mr. Wood, will be that they will be conducted on a strictly temperance basis.

— At the last meeting of the Academy of Medicine, May 6th, Dr. George A. Peters read a memoir of the late Freeman J. Bumstead, which was followed by a paper by Dr. John H. Packard, of Philadelphia, on Some Important Advantages to be secured by Oblique Sections of the Skin in Surgical Operations. At the last meeting of the Academy of Sciences Professor George Macloskie, of Princeton College, read a paper on The Structure of the Vertebrate Skull.

— The bill providing for the establishment of a State Board of Health has been defeated in the New York Assembly.

— Mr. William Astor has just presented \$5000 to the building fund of the Manhattan Eye and Ear Hos-

pital, whose managers are now putting up a suitable building for the institution at the corner of Park Avenue and Forty-First Street.

PHILADELPHIA.

— In this city, where a whitewasher styles himself "Professor," where a colored barber is a "Tonsorial Artist," and every pill and corn-salve vendor is a "Doctor," it has been consistently held that one man's signature to a death certificate is just as good as another's. This plan, indeed, has worked after a fashion for many years; but, as may be supposed, not without coming occasionally in conflict with the good old coroner system, when some possible "quests" were lost forever. Recently the "crownner" has decidedly gained a point. In a case of death, where a colored herb-gatherer signed the certificate, the irate official looked over his spectacles, and read the "doctor" a good lecture. However, he did not stop here, but at his solicitation the board of health authorized its registrar to adopt the rule "to refuse to issue a permit for burial unless the physician who signs the certificate of death is known to be a regular graduate of a recognized medical school; or, if not so known, can exhibit a lawful diploma, qualifying him for the practice of medicine."

Miscellany.

THE DECENNIAL CONVENTION FOR REVISION OF THE PHARMACOPŒIA.

MR. EDITOR, — The New England delegation to the sixth decennial convention at Washington for the revision of the Pharmacopœia consisted of Dr. Robert Amory, of Brookline, Mass., Prof. Edward S. Wood, of Harvard University, and Dr. Bennett F. Davenport, of Boston; Prof. George F. H. Markoe, of Massachusetts College of Pharmacy; Mr. Thomas Doliber and Mr. S. A. D. Sheppard, of Boston; Dr. H. M. Field, of Newton, Mass., delegate from Dartmouth College; Mr. A. L. Calder, of Providence, R. I.; and Dr. C. A. Lindsley, of New Haven, Conn., delegate from Yale Medical School.

The convention met at the National Medical College building in Washington, at noon on May 5th, and was called to order by Dr. J. E. Morgan, of Washington, the only surviving officer of the convention of 1870. Dr. Morgan was elected chairman, and Dr. D. Prentiss secretary, both *pro tem*. There soon ensued considerable discussion as to what associations were entitled to representation by their delegates, the call sent out by the officers of the last convention having called for delegates only from the incorporated state medical societies and the medical and pharmaceutical colleges; delegates from the United States army, navy, and marine service had also at the former conventions been always admitted. There were present also delegates from the Philadelphia County Medical Society, who claimed the right of being members of the convention, as it seemed to the delegates from most of the other States, unjustly; they justifying their claims by precedent, and on account of the report of work already done for the revision, which they were ready to lay before the convention. But the county societies in other States, who had likewise already done work