tempted, on that account, to place a ligature upon the common trunk, but for the fact which all experience proves, that the only safe mode of dealing with hæmorrhage from a large artery is to place ligatures upon the vessel itself, immediately above and immediately below the wound from which the blood is issuing, or in some other way to secure the vessel at the injured spot. I have seen cases where it has been impossible to get at the wounded vessel; and one case I remember, where the operating surgeon thought proper to place a ligature upon the vessel in its continuity, in preference to tying it at the punctured spot; but, as might have been expected, all the patients died from subsequent bleedings, brought about by the enlargement of the collateral branches, in the manner which I described to you not long ago, when the three cases of femoral aneurism which have lately been under my care formed the subject of my lecture.

Remember that, whenever it is practicable, your safest course is to secure the wounded vessel at the injured spot; and do not let obstacles which can safely be overcome stand in your way. In the instance I have related it was the facial artery which had been wounded—a vessel neither of the first nor of the second magnitude—and yet, because the life of my patient was being endangered, I did not hesitate to make a large wound, nor even to cut through the jaw, in order to secure it at the wounded spot. If the wounded vessel be of moderate size only, less formidable measures will sometimes suffice—such as were in the first instance adopted in the case of William Hays. And it was right, in my judgment, to try these simpler means before resorting to so severe an operation as that which was ultimately deemed necessary; but, when operative measures have been decided upon, such only as I have described will be at all likely to succeed, and, whenever practicable, should be performed. If the bleeding be from an artery of large size, as, for instance, one of the main vessels of a limb, the sooner the operation is performed the better. The employment, in such a case, of compresses and bandages, of tourniquets, of styptics, and so on, none of which are likely to succeed, can only render matters more desperate, by allowing time for diffusion of blood in the surrounding tissues, and for those subsequent changes which, by obscuring the parts involved, make the inevitable operation more difficult, and which are also attended by a condition of surgical fever little calculated to promote the healing of the damaged tissues.

GYNÆCOLOGICAL NOTES.

By ROBERT BARNES, M.D.,

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II.—OUGHT CONSUMPTIVES TO MARRY?

IT is hard to tell any one, much more a large class, that it is wrong to enter into those social relations which, if wisely contracted and preserved, give the chief charm to life. Indeed, advice upon this matter, although often sought, is often disregarded. Passion and immediate interests submit unwillingly to the cold reasoning of philosophy. Still the problem—Is it to the advantage of the community, or of the individuals primarily concerned, that those bearing the seeds of tubercular phthisis should marry?—is one which medical science may properly discuss.

My own observation tells strongly on the negative or prohibitory side.

1. I have now seen a good many very sad instances where young men and women in whom consumption was either latent, stationary, or slowly progressing, have sunk rapidly after being "engaged", or after being married. The chance of recovery, or even of not getting worse, of a tuberculous sufferer, depends upon observing the strictest hygienic rules; and of these rules a main one is the preservation of mental and emotional calm.

2. I have seen the effect of pregnancy and labour upon many consumptive women. I have no hesitation in saying that there never was a greater fallacy than that which affirms that pregnancy is antagonistic to phthisis. In my experience, labour commonly precipitates the fatal issue of the disease. Some perish during pregnancy; a large number sink rapidly after labour. This last trial breaks down the remaining forces of the system.

3. Consumptive people seem at least as apt in procreation as others. The children whom they bring into the world undoubtedly inherit the tubercular diathesis. How many of these perish quickly of convulsions, or, a little later, of abdominal or pulmonary disease! How few grow up to robust adolescence! And how large a proportion of those who survive to maturity repeat the sad history of their parents, scattering mental and physical distress around them!

All this is too familiar to medical men. Seeing these things on a

large scale, and looking beyond the mere individual aspect of the question, we cannot help noting the disastrous effects of the union of consumptive people upon the commonwealth. Physical degeneracy is stamped upon a large section of the community.

That physical diathesis which, in the easy and well educated, often develops a romantic sentimentalism, distorting the judgment of self and of relations to others, produces, in the needy and badly trained, those forms of mental degradation of which our workhouses, prisons, and asylums give so many terrible illustrations. I entirely concur in the opinions expressed upon this subject by Virchow.

It is clearly our duty to discourage marriage amongst consumptives. Public and private interests in relation to this subject are greatly in the hands of the medical profession. Legislation would be impossible. It is, therefore, superfluous to discuss the policy of legislating. In this free country, the sound legal maxim, "*Sic utere tuo, ut alienum non lædas*," meets with scant respect. It is difficult to forbid obstinate people from spreading small-pox; and the right of inoculating syphilis is so hotly maintained by a large section of the public, that the Contagious Diseases Act even is in jeopardy. But a healthy public opinion may do great good; and this public opinion must be based upon medical experience. Public opinion may, indeed, have little weight upon certain consumptives. Few persons, whilst under the thralldom of the most imperious and selfish of all the passions, will recognise the duty of sacrificing their individual desires for the public good. This form of patriotism has probably never seen many devotees. Families may, however, under the wise guidance of their medical advisers, commonly succeed in protecting their healthy sons and daughters from contracting engagements with tainted aspirants. Firmness in this direction will avert incalculable misery. Of course, this social proscription should not be indiscriminating. An isolated case of consumption breaking out in a family which can otherwise show a clean bill of health, cannot have the same significance as attaches to the multiplied recurrence of the disease in successive generations and different branches of a family. At any rate, in the case of persons actually tuberculous, there ought to be no doubt. In their own interest, as well as in that of those with whom alliance is contemplated, interdiction is dictated.

CASE OF PUERPERAL CONVULSIONS.*

By JOSEPH G. SWAYNE, M.D.,

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I have several times, at the meetings of this Branch of our Association, communicated cases in proof of the value of bleeding in puerperal convulsions; but I do not think that I have yet met with an instance so illustrative of the power of this remedy as the following.

On February 13th, 1869, Mr. Willett requested me to see Mrs. J., residing in West Street, Bristol. She was a primipara, aged 32, of rather robust make, who was expecting her confinement in about seven weeks. For a month previously she had been suffering from general anasarca, which had latterly much increased, and for a week before I saw her she had complained of severe headaches. About 10 A.M. on February 13th, she was suddenly attacked with epileptiform convulsions, and these returned about every half-hour until 1 P.M., when I first saw her. She had then had five fits, which had gradually increased in severity. There was almost complete unconsciousness between the fits, and the breathing was slightly stertorous. The pulse was 116. No dilatation of the os uteri or other signs of labour was present. On testing the urine, it was found to be highly albuminous—so much so that it was impossible to estimate the amount of deposit, because the whole of the fluid apparently solidified.

Mr. Willett informed me that in the morning he had purged her freely with calomel and jalap, had applied sinapisms to the nape of the neck and calves of the legs, and had given a diuretic mixture containing acetate and bicarbonate of potash.

As there was no symptom of labour, we both agreed that it would be inexpedient to bring it on; but, seeing the critical nature of the case, I strongly advised that bleeding should be resorted to without delay. Mr. Willett, who had previously some hesitation in performing the operation on account of the feebleness of her pulse, agreed to do so, and accordingly bled her to about sixteen ounces. I saw her with him at half-past five the same evening; she had had no fit since the bleeding, and was becoming slightly conscious—sufficiently so to make us understand that she was suffering pain in the region of the kidneys. We therefore applied a blister to the lumbar region. The convulsions returned about 8 P.M., recurring every quarter-of-an-hour, and increas-

* Read before the Bath and Bristol Branch.

ing in severity until 10 P.M., when Mr. Willett was called to her. He was so well satisfied with the result of the previous bleeding, that he again opened the vein and took away sixteen ounces more blood; she was also kept about four hours under the influence of chloroform. On the next day (Feb. 14) I saw her in consultation with Mr. Willett. She was much better, having had only one fit just after the last bleeding, and none since. She had not quite regained consciousness, but had asked for food, which she had taken with a good appetite. We again examined the urine and found very little albumen, the deposit forming only one-eleventh part of the whole quantity tested. She had been well purged by some calomel and compound jalap-powder, which Mr. Willett had given her, the evacuations being dark and slimy. I did not see her after this; but I heard from Mr. Willett that she went on favourably (but without entirely regaining consciousness) until February 16th (three days after the first attack of convulsions), when labour-pains set in, and she was confined between 10 and 11 P.M. with a still-born child. I should mention that no foetal movements had been felt since the convulsions had set in. From that time she went on well and made a good recovery.

Nothing, I think, could have been more satisfactory than the result of venesection in this case. In most instances, when convulsions come on during labour, it is not so easy to estimate the value of this remedy, because delivery, which is generally considered to be the most important remedy of all, is likewise resorted to. In this instance, however, there was no attempt at delivery; but after the first bleeding the convulsions were much mitigated, and after the last entirely ceased; whilst the amount of albumen in the urine, which before venesection was very large, had, after the last bleeding, been reduced to a minimum.

Since the above case was read, I have seen in the *Medical Times and Gazette* for July 30th a very conclusive case of a similar kind which occurred in the practice of Dr. Marten Cooke of Trinity Square. The patient, a primipara, was attacked with severe epileptiform convulsions eight hours after delivery, which were immediately relieved by a copious bleeding of fifty-four fluid ounces, and did not return. The fits had continued for two hours previously to the bleeding, and were apparently unaffected by sinapisms and cold to the head.

A still more satisfactory case in point is recorded in the *Lancet* for November 19th, 1870, by Dr. Deeley of New York. The patient, a primipara, was delivered by him during a violent attack of epileptic convulsions. Notwithstanding delivery, the fits recurred, sometimes as often as thrice in an hour, until the next day, when he bled her to twenty ounces. There were no more fits after the bleeding, and the patient recovered. The only medicine that gave relief prior to the bleeding was the hydrate of chloral. The first dose of this gave her two hours' respite from convulsions, but the second only one hour's. The condition of the urine was not tested.

Still more recently (in the *JOURNAL* for Saturday, Dec. 3rd), there is related a case which occurred at the Middlesex Hospital under the care of Dr. Hall Davis, and which is as conclusive as either of the above. The patient, a primipara, having previously been affected with anasarca and albuminuria, was attacked with convulsions two hours after delivery. The fits continued for some hours, notwithstanding the use of purgatives, blisters, cold to the head, and chloroform. The latter mitigated the symptoms, but "each time when its effects passed off, the fit became as violent as before". Thirty-four ounces of blood were then taken from the arm, and there was no return of the fits afterwards. The albumen in the urine rapidly diminished, and the woman made a good recovery.

Dr. Davis observed that this case was "an illustration of puerperal eclampsia occurring in a plethoric primipara, and exemplifying, on the one hand, the failure of anæsthetic treatment, and, on the other, the prompt success of blood-letting in this form of the disease."

NOTES ON CONSUMPTION.

By RICHARD PAYNE COTTON, M.D., F.R.C.P.,
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I.—VARIETIES OF CONSUMPTION.

I BELIEVE that I was amongst the first to argue that consumption has many varieties, and that such varieties present marked differences both in their symptoms and progress. Since then, this doctrine has been on the increase; so much so, indeed, that each year brings with it new and totally different views of the entire nature of tuberculous diseases, and we are asked to renounce absolutely all our previous knowledge of the subject. I believe, however, that in this particular we are going a little too fast.

It is becoming too much the custom to form our views of human pathology from experiments, interesting perhaps in themselves, but having, as I conceive, very little connexion either with the origin or progress of disease such as we are called upon to witness and to treat in the human subject. Alas for the poor guinea-pigs! How many of them have been tortured and slain, apparently with no other result than to prove that they are not men, and that men are not guinea-pigs; that the one differs from the other both physiologically and pathologically; and that even Darwinian ingenuity cannot lessen the vast gulf which ever has existed, and ever will exist, between them. The celebrated guinea-pig experiments of Villemin, apparently showing the inoculability of tubercle, and favouring the view of its existence as a zymotic disease, were soon disposed of by the subsequent labours of Drs. Andrew Clark, Burdon Sanderson, and Wilson Fox; and we are left, as to the real origin of tuberculous diseases, much as we were before.

I have always considered that the great variety met with in phthisis is due to original differences in the tubercular deposit—to the *grade* of tubercle, as it may be called; or, going a little further back, to what I have called the *degree of phthisis* under which the deposit is formed. It may be difficult, or perhaps impossible, to demonstrate this conclusively; but it is nevertheless, to my mind, the only view which can account for the almost endless differences we encounter both in the symptoms and progress of consumption. Gerber was, I believe, the first who distinguished tubercle according to its *grades of vitality*. He described tubercular matter as (1) unorganised or almost granular; (2) cytoblast; (3) cell; (4) filamentous—the one being just a little higher than the other in the scale of organisation. It must necessarily follow that tubercular deposit thus variously constituted would present great diversity in its tendency to further degradation or softening; and if, to such a condition, we add the almost endless varieties in the physical and constitutional state of individuals, and when we further consider how each must influence the other, we have, I think, a very reasonable explanation of the varieties of phthisis, and can understand how boundless are the differences which the disease may assume.

It may be practically useful to compare phthisis with certain other blood-diseases. It is, for example, like some eruptive affections, except in the important particular that its "eruption" (tubercle) takes place internally, instead of externally. Both in it and in them, there is a preceding diseased condition of blood; in both, there is an elimination of morbid material; and in both, such elimination sometimes does, and sometimes does not, entirely relieve the system. In both, too, there is often a temporary suspension of the constitutional disease—followed, perhaps, by one or more relapses; the patient in the interval being tolerably or even absolutely free from active symptoms, and presenting no traces of mischief, except in the presence of the eliminated material. Phthisis also may not inaptly be likened to the remitting and intermitting classes of disease, by the same exhibition of the more or less complete but temporary suspension of its constitutional symptoms. Like gout and rheumatism, too, it has both its general and local manifestations, which may be continuous, or may subside, or again and again be renewed with almost endless differences and degrees of severity; in the one case the system being purged of lithic acid, and in the other of tubercle. It appears to me that such a comparison with other disorders may help to explain the almost infinite varieties of chronic phthisis.

The various forms of consumption, therefore, depend, as I believe, not upon any essential differences in the disease itself, but upon differences in the original structure and consequent tendencies of the tubercular deposit, as determined by the severity or *degree* of phthisis under which it has been formed, acting in combination with natural varieties in the constitution and resisting capabilities of different people.

Amongst the forms of consumption regarded as having a distinct origin, the so-called *hæmorrhagic phthisis* may be first considered. This view of the disease is not new, but is founded upon an ancient creed. In the doctrine, however, I must confess myself to be a complete unbeliever, as I have never seen a case which has appeared to me to justify any faith in it. I admit that, were I disposed to seek out such a form of phthisis—were "the wish father to the thought"—I could relate several cases of consumption which might be so explained. In all such instances, however, I have found it easier, and more consistent with our admitted knowledge of disease, to discover a more simple explanation. I do not believe that pulmonary hæmorrhage of *non-tubercular* origin can fairly be admitted amongst the causes of phthisis. I regard any form of hæmorrhage from the lungs associated with phthisis as dependent upon the phthisis, and not the phthisis as dependent upon the hæmorrhage. If an escape of blood into the lung-tissue were one of the causes of tuberculosis, those consumptive cases which are accompanied with hæmoptysis would necessarily be found the most grave;