Many attempts have been made to enact laws of a similar kind in this country. It would be vain repetition to do more than mention facts so familiar and recent to all of us. The latest Midwives Bill of 1899 is a case in point. Based upon its immediate predecessor it had the advantage of the General Medical Council's recommendations; it provided that no woman shall call herself or habitually practise for gain as a midwife unless she has obtained a licence; that in order to be licensed she must produce evidence of having undergone a proper training and subsequent examination, or at the time of passing the Bill been in *bonâ-fide* practice as a midwife. The Bill did not render it illegal for any person to render assistance to a lying-in woman in an emergency. Many thorny details were associated with this Bill; it bristled with difficulties which it is unnecessary now to recall or to recapitulate. Amendments were proposed by the General Medical Council, the British Medical Association, by numerous Branches, Societies, and individuals. It was altered in the Standing Committee of the House of Commons; it was pricked, mutilated, distorted, until at length it became almost unrecognisable from its original form; finally it came to an ignoble end, being talked out in the House, done to death by its own promoters and well-intentioned friends.

I have shown that midwives have existed since the beginning of the world; that they will continue as long as the human race lasts is equally certain. Alter their names if you wish or can; call them midwifery nurses or any other appellation you can suggest; license them, register them, restrict them, penalise them as much as you will, but, above all, be fair to them; do not goad them to resistance; allow them, educate and instruct them for the good of the race and the honour of the profession.

I venture to predict that the time will come when the Government of the day will have to take up the subject and propound a Midwives Bill. The voice of public opinion will be behind it. "Great is Diana of the Ephesians!" will then be a useless cry. The tide will sweep forwards; it will be ours to ride upon the crest of the wave if we so will; but it will also be open to us to attempt to stem its force, and to find, too late, that the power was irresistible.

AN ADDRESS

ON

MILITARY SURGERY OF THE TIME OF AMBROISE PARE AND THAT OF THE PRESENT TIME.

Delivered before the East York and North Lincoln Branch of the British Medical Association.

By C. H. MILBURN, M.B., M.S.,

President of the Branch; Surgeon to the Victoria Hospital, Hull.

My first duty is to express to you my sense of the honour you have conferred on me by electing me to the important position of President of this Branch. I can assure you that I appreciate the compliment highly, and I trust, as the first President in the new century, that I shall, with your assistance and support, be able to hand on the office to my successor with no tarnish on the lustre with which I receive it from my immediate predecessors.

In the annual presidential addresses with which your souls are vexed, but to which you listen with a patience and courtesy worthy of a better cause, it is usually the fashion to review either the whole, or, by less ambitious men, some special division of the science of medicine, and to point out the progress made and the lessons taught during and by that progress. I do not wish in this case to be outside the fashion, and therefore, as a subject which during the last eighteen months has occupied our thoughts more or less, I have chosen as the basis of a short address, The Military Surgery of the Time of Ambroise Paré and that of the Present Time.

I wish therefore to-day, briefly, to emphasise the fact of progress in medicine, because we sometimes fail to recognise that we live in a time when knowledge is far advanced, beyond that of even a few years ago; and because we have all that advanced knowledge we are disposed to pity those who had the misfortune to live in those past years; and all the more, if they lived centuries ago. We think they knew nothing, and their work is, therefore, only worthy of our contempt; or, at any rate, they can have our sympathy for their ignorance. We give them no credit for the work which has made our progress possible. And yet, if we read old treatises or books on such subjects as those in which progress is possible—and in this case, on surgery—we often find that practices were in vogue then which we think are new, and known only to a favoured few of us; that theories were invented and squabbled over to account for results, the causes of which are unsettled even to this day; that reasons were given then to explain facts which are not yet explained, and which are theorised over as dogmatically now as then. For instance, we find that observations were made of facts in connection with wounds which were explained on certain theories then, but which we explain in an entirely different way now, and just as much to our satisfaction. Who can say that "we have reached finality," and that someone, years hence, may not be able to explain facts in a different way, and also to his complete and finite satisfaction? On this point Sir W. Mac Cormac, at the dinner when he received the Honorary Freedom of the Barbers' Company, on March 26th, said:

> It is interesting to note that Paré, when he was 65 years old, dedicated, in 1575, his great work on surgery to the King, and he there tells us that "he had laboured forty years to bring his art to perfection, and striven so hard to attain his end that the ancients have nought wherein to excel us, and posterity will not be able to surpass us."
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> It is extraordinary that this boast of attained perfection, made more than 300 years ago, remained largely true until the latter half of the nineteenth century witnessed the transformation of surgery. This boast of perfection has been made with curious frequency by surgeons. The celebrated French surgeon Baron Boyer, who was also at one time a barber-surgeon, says in the preface to his great work on surgery in 1814 that surgery had made the greatest progress and had arrived at the highest degree of perfection of which it was susceptible. Sir John Erichsen and others have in their time said much the same thing.

Some years ago an English translation of this book by Ambroise Paré came into my possession, and in a desultory way I have occasionally looked through it and been amused at his phraseology and the quaintness of his illustrations, or "effigies" as he calls them. Being interested in military surgery I have read his chapters on gunshot wounds, and found much that was suggestive. Though his pathology is of course obsolete, his histories of his cases are good; and I have thought it might be useful to briefly recite some of them with their treatment, and then see what advance we can claim in the treatment of battle wounds as shown by a few reports of some of the cases so far recorded from the Boer war.

Before doing so it might, however, be worth while going over very shortly, a few facts in connection with Ambroise Paré's life. By so doing, we shall be better able to judge of the opportunities which he had to practise military surgery, and so get our foundation on which to build the superstructure, which shows the claims he had to be called the "Father of Modern Surgery;" and, incidentally, to learn, on what is the best authority, how military surgery was carried on in the sixteenth century.

Quoting from an article in the *Medical Review* of April this year, I find that Ambroise Paré was at one time a barber's apprentice, who arrived in Paris in 1532, and set about being initiated into the mysteries of shaving, hairdressing, and poulticing. Becoming a master of his trade in 1536, he opened shop under the barber-surgeon's sign of the three basins. In the intervals of his trade he probably studied at the hospitals, and during the wars of Francis I he gained that knowledge of wounds and fractures which renders him the "Father of Modern Surgery;" nevertheless, it was as a barber that he started life. As such he was illiterate—that is without Latinity—and we find him deploring in the dedication of one of his books, that

> it hath not pleased God so much grace to grant me that in youth I should have been based in Greek and Latin.

It was only by "a discreet process of dissimulation and a grave infraction of rules" that Paré received his cap and degree from the French College of Surgeons of that day. He was attached to the persons of successive kings, and was one of the few intimates of Charles IX, whom that monarch was able to save from the horrors of the St. Bartholomew's Massacre. Charles IX's successor, Henry III, so valued Paré that through him the whole body of surgeons came into favour.

Francis I had created a Faculty of Surgery in 1544, with privileges not inferior to those of the University of Paris. His decree was renewed by Henry III, who further gave the surgeons permission to open a course of public lectures. This will give some idea of the important part Paré played in the development of the recognition of the value of the surgeon's art. It also shows that during the troublous and warring times of Francis I, Henry II, Francis II, and Charles IX, he would have such opportunities as fall to the lot of few surgeons, of seeing and treating wounds received in war.

As an example of the surgical treatment of those days, I quote the following case from Paré's book:

Whilst I was a surgeon to the Marshal of Montejan at Turin, a certain common souldier received a wound on his wrist with a musketball, by which the bones and tendons being much broken, and the nervous bodies cruelly torn, there followed a gangrene, and at length a mortification even to the elbow; besides also an inflammation seized upon the middle part of his chest, and there was . . . a certain disposition to a gangrene: whereby it followed, that he was painfully and dangerously troubled with belchings, hicketings, watchings, unquietness, and frequent swoundings which occasioned many chirurgeons to leave him as desperate. But it so fell out that I (overcome by his friends entreaty) undertook the cure of this wretched person destitute of all humane help. Wherefore, knowing the mortification by its signs, I cut off the arm by the elbow as speedily as I could, making first the ligature: I say I took it off not with a saw, but onely with an incision-knife, cutting in sunder the ligaments which held the bones together, because the sphacel was not passed the joint of the elbow. Neither ought this section to be counted strange, which is made in a joint; for Hippocrates much commends it, and saith that it is easily healed, and that there is nothing to be feared therein besides swounding, by reason of the pain caused by cutting the common tendons and ligaments. But such incision being made, the former ligature could not hinder but much bloud must flow from thence, by reason of the large vessels that run that way; wherefore I let the bloud to flow plentifully, so to disburden the part, and so afterwards to free it from the danger of inflammation and a gangrene, then presently I stanched the bloud with an hot iron, for as yet I knew no other course. Then (gently losing the ligature) I scarified that part of the brawn of the arm which was gangrenated, with many and deep incisions, shunning and not touching the inner part by the reason of the multitude of the large vessels and nerves that run that way: then I presently applied a cautery to some of the incisions, both to stanch the bleeding, and draw forth the virulent "sanies" which remained in the part. And then I assailed the spreading putrefaction, by applying the formerly prescribed medicins: I used all sorts of restrictive medicins to stay the inflammation of the chest. I also applied epithimaes to the heart, and gave him cordial potions and boles, neither did I desist from using them until such time as his belchings, hicketings, and swoundings had left him. Whilst I more attentively intended these things, another mischief assails my patient, to wit, convulsions, and that, not through any fault of him or me, but through the naughtiness of the place wherein he lay, which was in a barn everywhere full of chinks, and open on every side: and then also it was in the midst of winter, raging with frost and snow, and all sorts of cold: neither had he any fire or anything necessary for preservation of life, to lessen these injuries of the air and place. Now his joints were contracted, his teeth set, and his mouth and face were drawn awry, when I pitying his case made him to be carried into the neighbouring stable which smoaked with much horse-dung; and bringing in fire in two chafing dishes, I presently anointed his neck and all the spine of his back, shunning the parts of the chest with liniments formerly described for convulsions: then straightway I wrapped him in a warm linnen cloth and buried him even to the neck in hot dung, putting a little fresh straw about him. When he had stayed there some three days, having at length a gentle scouring or flux of his belly and plentiful sweat, he began by little and little to open his mouth and teeth, which before were set and close shut. Having got by this means some opportunity better to do my business, I opened his mouth as much I pleased, by putting this instrument between his teeth. Now drawing out the instrument, I kept his mouth open by putting in a willow-stick, on each side thereof, that so I might the more easily feed him with meats soon made, as with cows milk and rear eggs, until he had recovered power to eat, the convulsions having left him. He by this means, freed from the convulsion, I then again began the cure of his arm, and with an actual cautery seared the end of the bone, so as to dry up the perpetual afflux of corrupt matter. It is not altogether unworthy of your knowledge, that he said, how that he was wondrously delighted by the application of such actual cauteries, a certain tickling running the whole length of the arm, by reason of the gentle diffusion of the heat by the applying the caustic; which same thing I have observed in others, especially in such as lay upon the like occasion in the hospital of Paris. After this cauterising, ther fell away many and large scales of the bone.....besides, when there was place for fomentation, with the decoction of red rose leaves, wormwood, sage bay-leaves, flowers of camomil, and dill, I so comforted the part, that I also (at the same time, by the same means) drew and took away the virulent "sanies" which firmly adhered to the flesh and bones. Lastly, it came to pass, that by God's assistance, these means I used, and my careful diligence, he at length recovered. Wherefore I would admonish the young chirurgeon, that he never account any so desperate, as to give him for lost, content to let him go with prognosticks: for as an ancient doctor writes,—that as in Nature, so in diseases there are also monsters.

Translating this rather long case into our modern terminology, we find that this man had a compound comminuted fracture of the wrist; that he developed gangrene, and I take it by the description of the "convulsion" that he also had tetanus. Yet, with all these complications, and in spite of treatment, he recovered. I say "in spite of treatment" advisedly, for, apart from the gangrene, knowing as we do that tetanus is caused by the tetanus bacillus, whose habitat is earth, we wonder how he did get better, seeing how completely this "common souldier," as he is called, is placed under the most unfavourable conditions possible for recovery. He undergoes amputation at the elbow-joint, no doubt roughly performed, and without an anæsthetic; he is bled freely; he is laid in a barn "full of chinks," in the midst of winter, with no comfort; and to crown all, buried to the neck for three days in "fertiliser." But he recovers. One feels that he himself deserves the credit of this, rather than the surgeon's skill.

What would be the present day treatment of such a case? A soldier so shot through the wrist would be promptly, or within a very short time, picked up by the stretcher-bearers, a tourniquet or the "first field dressing" having probably in the meantime been applied. He would then be taken to the field hospital, and further examined. If there was much smashing of bones, in due course he would be anæsthetised, loose fragments removed, the wound thoroughly cleansed, cut tendons sutured, and an antiseptic dressing and splint put on. He might then be slowly passed down to the base, and there carefully nursed back to health, with, in every probability, the limb saved and serviceable. If, through any mischance, tetanus supervened, tetanus antitoxin would be injected, and a disease overcome which has hitherto been dreaded by both surgeon and patient. Looking both at the means and the results, I think you will agree with me that surgery has a great deal to be proud of, and the soldier a great deal to be thankful for, in the progress shown, between the two extremes of which these cases are types. As a matter of fact, I believe there has been a remarkable freedom from tetanus during the Boer war; at any rate, I have not come across records of many cases.

Apart from the question of tetanus, however, the vast majority of cases of bullet injury seem to have run a most uneventful course. Many reasons have been advanced for this pleasing result. Mr. Smith, the civil surgeon in charge of the Surgical Division of No. 9 General Hospital, in an article in the BRITISH MEDICAL JOURNAL of April 20th, suggests the following:

1. The sterility of the bullet, owing to the heat engendered by its great rotatory velocity.
2. The purity of the atmosphere.
3. The hardened, fit condition of the men.
4. The absence of serious oozing.
5. The absence of air, or foreign bodies in the track.
6. The sun and the dry atmosphere, which glaze and seal up the small wound before it has had time to become contaminated.

To these, I think, should be added:

7. Promptness of dressing; this resulting from the fact that each man carries attached to his uniform a "first field dressing," which has been applied at once, either by the wounded soldier himself, or by a comrade (as witness the large number of V.C.'s awarded for such aid under fire).

8. The greater gentleness of handling and transport of injured men, owing to the greater extension of training of soldiers in "first aid." Increase of the damage is thus prevented, as there is not, as in the past, rough and unintelligent, though well-meaning, assistance given.

9. And, in my opinion, as the greatest of all, is the increased science, knowledge, and skill exhibited by the surgeons of the Royal Army Medical Corps, and their civil colleagues. They are not the men themselves to call public attention to their work, either in this or previous wars, so that I think it behoves those who have watched and followed their work, to call public attention to it, and as the Government and the public do not give them the rewards and the credit to which they are entitled, I hope it will be some solatium for them to know that their fellow civil practitioners consider that their conduct and work has been such as well merits the commendation of, "Well done, thou good and faithful servant."

Our eulogies of the R.A.M.C. cannot be too great, nor our support and assistance to them too thorough in their fight against War Office starvation of the medical service and red-tapeism. Has any other unit of the South Africa Field Force except the R.A.M.C. been expected to carry on war service

with a peace establishment? And further, with practically no reserve to draw upon (except civil ambulance organisations),* to make up the wastage which occurs even in peace, let alone in war. Neither the artillery, the cavalry, or the infantry was expected to do war work with its peace establishment. Yet the R.A.M.C. was; and astonishment was shown, and abuse scattered, when it was proved to be a physical impossibility. Worse still, it was expected to do that work with really less than peace strength, for it has been well known that even before the war broke out the numbers of the R.A.M.C. were far below those authorised, even if that strength were sufficient for ordinary times. Why was that? Because the service was, and is, most unpopular, and will become more so, unless radical alterations are made by the War Office as regards fair and equal treatment, pay, privileges, etc. And unless the authorities are quick to recognise this they will soon have no R.A.M.C. left; for men already in leave it as soon as they can, and there are none to take their places.

I feel that it behoves us to recognise the injustices done to our military brethren, and to appeal to all to do what in them lies to bring about justice (for that is all that is asked) for the R.A.M.C.

Returning now to the consideration of bullet wounds, we find that in the classifying of gunshot wounds Paré says that they are usually round, on account of the bullets being round. As a result of this, he says: "All wounds which are made in man's body by gunshot, whether simple or compound, are accompanied by contusion, dilaceration, distemper, and swelling;" and up to the introduction of elongated projectiles that was undoubtedly true, and the injuries produced were correspondingly severe. With the exception of shrapnel (which are scattered on the explosion of a shell), all bullets are now elongated. The reason is that they are better able to take the grooving of the rifle, which makes them rotate on the axis of the line of flight. We thus get a flatter trajectory, and therefore greater accuracy. Another effect is much-increased velocity and a longer range, because more powerful explosives or propellants can be used, and with the bullet fitting the rifle bore closely, there is no waste of power behind. Paradoxical as it may seem, with all this greater accuracy and power, there is now much less damage done than in the old days of the round bullet, for the elongated one, by its high velocity and rotatory motion, bores its way between planes of muscles, bones, blood vessels, and nerves, pushing them to one side rather than smashing its way through. There have been many cases reported in which this must have happened, but I think the following is as typical as any I have read. In *A Subaltern's Letters to his Wife*, he describes how—

> Arnold a Yorkshireman belonging to Rimington's Guides, got a bullet through his head, and yet rode fifteen miles into Bloemfontein without falling off his horse. The bullet entered close to the orifice of one ear and came out through the lobe of the other. Arnold smoked his pipe in hospital that same evening, and next day he got out of bed to go back to his corps, but was forcibly prevented by the nurse. The following morning, however, he was discharged cured.

In this case I have no doubt the bullet had made its way amongst the muscles in front of the bodies of the cervical vertebræ, also practically threading its way through the large vessels and nerves of the neck, and just missing the mastoid processes. The following is another interesting case, described by Mr. Smith in the article which I mentioned before:

> Private McK., of the Inniskilling Fusiliers, wounded at Colenso, February 24th. The bullet had passed obliquely through the lower part of the neck and the upper part of the thorax, with entry at the centre of the left sterno-mastoid and exit in the right posterior axillary fold, 1 inch external to the angle of the scapula. It is difficult to imagine how the great vessels escaped. The chief injury was to the left brachial plexus. For some time he had complete motor and sensory paralysis of the arm. Subsequently sensation returned, and when I saw him, though the muscles were weak and atrophied, some motor power had returned to all except the group supplied by the musculo-cutaneous nerve.

Even in this case there cannot have been much more damage done than bruising and contusing, or there could not have been the satisfactory result of the recovery of power and sensation that ensued. Regarding the wound of entrance, the area of the point of impact is much less than with a round bullet, and so the point of entry is naturally much less. On the other hand, the wound of exit is often crater-like in its extent. This may be because, even in the short time that elapses between entrance and exit, a reflex contraction in rear of the bullet concentrates the expansive and radiating force in the direction of the line of flight, and so makes it focus the energy on the surfaces internal to the skin and on the skin itself, finally bursting its way out, and not infrequently carrying with it fragments of bone, etc. Another reason is that the bullet, in its passage through the tissues, may have its point "knocked up," or flattened, or otherwise made irregular, if it comes in contact with a hard bone. This is, however, not so common now, unless the point of the bullet has its nickel casing filed or cut off so as to expose the lead, or unless the bullet is of the soft-nosed or expanding variety, which makes it practically the same as regards result. I regret that there is abundant evidence that these bullets have been used. Only a vengeful nature can justify the use of such, for they maim and disable with much more unnecessary cruelty than is produced by the hard-pointed pencil bullet, which equally well places a man *hors de combat*, but does it in a "gentlemanly" way, and with not a tithe of the suffering nor with such an amount of permanent disablement.

The question of bullets which have been wilfully poisoned before being fired is an interesting one, and one not brought up for the first time during the Boer war. In describing "wounds made by gunshot," Paré says:

> Now to come to those who think that the venenate quality of wounds made by gunshot springs not from the powder but from the bullet wherewith some poyson had been commixt or joyned, or which hath been tempered or steeped in some poysonous liquor. This may sufficiently serve for a reply, that the fire is abundantly powerful to dissipate all the strength of the poyson, if any should be poured upon or added to the bullet. This much confirms my opinion which everyone knows, the bullets which the King's souldiers used to shoot against the towns-men in the siege of Rouen, were free from all poyson, yet for all that, they of the town thought they were all poysoned, when they found the wounds made by them to be uncurable and deadly. Now on the other side, the towns-men were falsely suspected guilty of the same crime by the King's army, when as they perceived the Chirurgeons labour in curing wounds made by the bullets shot from Rouen, to be frustrated by their contumacy and malign nature; each side judging of the magnitude and malignity of the cause, from the unhappy success of the effect in curing. Even as among physicians, according to Hippocrates, all diseases are called pestilent, which arising from whatsoever common cause kill many people: so also wounds made by gunshot may in some respect be called pestilent, for that they are more refractory and difficult to cure than others, and not because they partake of any poysonous quality, but by default of some common cause, as the ill complections of the patients, the infection of the air, and the corruptions of the meats and drinks.

I venture to think that Paré, in speaking of "infections and corruptions," had anticipated our theories of sepsis of the present day, though not quite on our lines. And, further, you note how history repeated itself, in that each side has charged the other with using poisoned bullets, though I must confess that I have not come across any definite evidence proving it against the Boers, and we do not have occasion to do such things in the British army, even if we desired.

The probability is, I think, that many of the Mauser bullets have been in stock some time, that they have been coated with some oily or fatty substance, as a lubricant; that in the course of time this coating has become decomposed or turned "rancid," and the acid formed combining with the copper of the cartridge casing (which is attached to the bullet) has formed a copper salt, and so produced the green or other coating, which has been observed in certain bandoliers or captured stores of ammunition. I venture to submit this as the most likely reason for the unusual appearance of the bullets, and which has originated the report that they were poisoned.

Passing to another division of military surgery, I come across in Paré records of the treatment and cure of penetrating wounds of the trunk cavities or of the hollow viscera. And these, therefore, we can note as landmarks showing the great advance that has been made between the sixteenth and twentieth centuries; though I am not far wrong, I think, if I state that as much real progress has been made in the last fifty years, as in the whole of the preceding three hundred and fifty. For instance he describes the case of

> Captain Francis d'Alon, a native of Xantoign, who before Rochel was shot with a musket bullet, entring by the brest bone near to the sword-like grisle, and passing through the fleshy part of the midriff, went out

* For instance, the St. John Ambulance Brigade provided 1,934 non-commissioned officers and men (orderlies) for South Africa, and 5 for China, in 40 contingents as required. The War Office acknowledgement is, as usual when things medical are affected, that is, wanting.

at the space between the fifth and sixth bastard ribs. The wound was healed up on the outside, yet for all that there remained a weakness of the stomach, whereupon a pain of the guts like to the colick took him, especially in the evening, and on the night, for which cause he durst not sup but very sparingly. But on the eighth moneth after, the pain raging more violently in his belly than it was accustomed, he died, though for the mitigating thereof Simon Malmedy and Anthony du Val, both learned physitians, omitted no kind of remedy. The body of the deceased was opened by the skilful chirurgeon, James Guillemeau, who found a great portion of the colick-gut swelled with much wind, gotten into the chest through the wound of the diaphragma, for all it was so small that you could scarce put your little finger in thereat.

Further on he says:

Not long ago Giles le Maistre, a gentleman of Paris, was run through the body with a rapier, so that he voided much blood at his mouth and fundament divers days together, whereby you know the guts were wounded, and yet he was healed in twenty days.

Another case he thus describes in his quaint way:

I can bring as a witness the steward of the Portugal embassadour, whom I cured at Melun of a wound made with a sword so running through the body that a great quantity of excrements came forth of the wounded guts, as he was a dressing, yet he recovered.

As analogues of these cases I quote the following, taken at random from the published records of No. 9 General Hospital, and do not doubt that they are typical of possibly many hundreds more:

CASE I.—Sergeant H., of the Shropshires, admitted April 30th, wound of chest, entering in front at the right border of the sternum in the fourth interspace, exit behind the posterior axillary line at the level of the ninth rib. Hæmoptysis began instantly and continued for some days, but on the fifth day patient sat up in bed and made a rapid recovery.

CASE II.—Trooper B., of the Imperial Yeomanry, also a chest wound entering on the left side 1 inch internal and above the left nipple, exit below angle of left scapula. There was hæmoptysis for three days, but on the eighth day patient was up and the wound practically healed. It is almost impossible to suppose that the right auricle was not involved in the first of these cases and the left ventricle in the second. A Mauser bullet may presumably pass through the thick muscular wall of the ventricle, and even penetrate the ventricular cavity, without a fatal result, owing to its small size, but one can scarcely imagine that the thin-walled auricle could so escape.

CASE III.—Private F., New Zealand Mounted Rifles, wounded April 30th, entry in the seventh rght intercostal space in the anterior axillary line, 1½ inch below the upper limit of liver dulness. The bullet passed obliquely through the abdominal cavity, issuing on the left side immediately above the centre of the iliac crest. A quantity of blood was vomited two hours after the wound, but there was no subsequent hæmatemesis, and the patient was sent down convalescent a month later. In this case the pleura, liver, stomach, colon, and probably the small intestine must have been traversed.

The contrast between the cases of the sixteenth century and those of the nineteenth is very marked, both as regards course and result; and as for the treatment, in the latter series of cases, a "masterly inactivity" (that is, as far as surgical action is concerned) seems to have been the correct policy to pursue.

I am afraid I have only been able to touch very superficially in the time at my disposal upon the fringe of the subject in its modern phase, but I trust that what I have said has once more emphasised a fact which, unless we are careful, we are apt to forget—namely, that there is no standing still in medicine—I use the word in its broadest sense. It is a science which advances daily, and we must take our lessons from everywhere we can. Books old, books new; facts, observations, ideas, statements—old, revived, or new—all should help us to see and understand that medicine is one of the most rapidly advancing sciences, and that we, as its servants, wishing to do faithful service, must be willing and able to learn our duty from each and every source.

SUCCESSFUL VACCINATION.—Dr. Napier Close, Public Vaccinator, No. 2 District, Chard Union, has been awarded the Government grant for successful vaccination.

CONGRESS OF FRENCH NEUROLOGISTS.—The annual Congress of French and French-speaking Alienists and Neurologists will be held this year at Limoges under the presidency of Dr. Gilbert Ballet (Paris). The questions on the programme are as follows:—Neurology: Pathological physiology and pathogeny of the muscular tonus, of the modifications of reflexes, and of contractures in affections of the neuraxis (to be introduced by Dr. Crocq, of Brussels). Mental Pathology: Acute delirium from the clinical, anatomo-pathological, and bacteriological points of view (to be introduced by Dr. Carrier, of Lyons). Administration: Assistants and attendants in asylums (to be introduced by Dr. Faguet, Physician to the Maison Blanche Asylum). The Secretary-General of the Congress is Dr. Doursout, Naugeat Asylum, Limoges.

A CLINICAL LECTURE
ON
A CASE OF PURPURA RHEUMATICA.

Delivered at the Western Infirmary, Glasgow.

BY RALPH STOCKMAN, M.D., F.R.C.P.E., F.F.P.S.G.,
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SYMPTOMS.

THE patient with whose case we are to occupy ourselves today is a man, aged 39, a "holder-on" by occupation, married, and who has now been in hospital more than two months. He was admitted on February 17th, complaining of diarrhœa, general weakness, pain and swelling in some of his joints, and an eruption situated chiefly on his lower limbs. He can assign no cause for his illness. The diarrhœa began about seven weeks before admission, loose motions occurring from two to six times daily without any particular pain, and during all this time he also had considerable discomfort and flatulence in the stomach after taking food. These symptoms were accompanied by a marked feeling of weakness, so much so, that from the very beginning of his illness he was off work and confined to the house or in bed. About the same date his ankle-joint and knee-joint became painful, so that he experienced difficulty in walking; but he states that he did not notice any particular swelling in them till about a week before his admission. The eruption on his legs was present from the beginning, but does not seem to have particularly attracted his attention.

He is a healthy-looking man, is not emaciated or pale, and has had no previous severe illnesses. Seven years ago, however, he had an illness which, he says, was exactly similar to this but much slighter in degree. He was treated for it as an out-patient of this infirmary, and very soon recovered.

On admission his legs and thighs were covered with very numerous purpuric spots mostly about the size of a pea, but some were smaller and others much larger. The smaller and medium-sized ones were more or less round in shape, but the larger were very irregular in outline and many of them elongated. There were also petechiæ and vibices, but not in large numbers. They appear in successive crops every few days, hence some of them are of a bright purplish-red colour and quite recent, while others are fading. They do not disappear on pressure, and are not followed by desquamation. There have sometimes been a few similar spots on the flanks and lower abdomen, on the shoulders and upper arms, but nowhere else. Since admission, sixty-nine days days ago, there have been twenty-two distinct eruptions, some much more abundant than others, and chiefly on the lower limbs. The fresh spots are of a bright purplish-crimson hue, in a day or so they become dull-red, then of a light-rust colour, slowly fading until in four or five days they are almost imperceptible. Some take on a faintly greenish-yellow tint, but although carefully observed we have never seen them pass through the familiar pronounced green and yellow tints seen in bruises and in scurvy. Walking about the ward always developed an eruption at first, but has now ceased to do so. Each outbreak of spots is preceded for a few hours by pains in his large joints, so that he can foretell their occurrence. Both ankle-joints have been slightly swollen during the whole time of his stay in hospital; they are painful on manipulation, and there is slight œdema along the borders of the tibiæ. The knee-joint, shoulder-joint, and elbow-joint are also painful on movement and very slightly swollen. The forearms are both slightly œdematous, and occasionally he has complained of pain in the muscles of the arms and legs. The urine sometimes contains a trace of albumen, and he has a little bronchitis. His arteries are somewhat hard for his years, but otherwise the circulatory organs seem healthy. His gums are slightly soft and spongy, and bleed rather easily on pressure, but he has never had any particular tendency to hæmorrhage from this or any other mucous surface.

His blood was examined shortly after admission, when the red corpuscles were found to number 4,cco,coo per c.mm.; the