hand and mallet in right. Which does the most writing—the chisel hand or the mallet hand? The sign-writer exhibits a remarkable instance of two-handed writing: the right hand of the painter holds the brush and rests on the mahl-stick held in the left. The left hand accurately moves the supporting stick as the letters are marked with the brush, the painter gets the vertical part of his flourish by the movement of his left hand, and the horizontal by the movement of the right.

But the most extraordinary performance in writing is the inscription of the Braille type by the blind; it is an astonishing piece of work. The writing is done from right to left; the right hand holds the tool which impresses the paper, whilst the left guides the point into the marks on the guiding frame; when the writing is complete the writer withdraws the paper, reverses it, and reads the embossed characters, feeling with both hands from left to right. Often I have noticed the left hand running on to the beginning of the succeeding line whilst the right hand was feeling out the finish of the line above. Was bimanual division of labour ever more surprising!

But enough. The examples I have given show clearly, I think, that ordinarily trained men are possessed of a real ambidexterity, or, as it would be better stated, co-ordination of bimanual action. It follows from this that the aim of the Ambidextral Culture Society is futile; mother nature has already done the work which this new society proposes, and done it so quietly and secretly and so delicately that the sponsor of the society has not seen her working. To the assertion of its founder that it would be well to train children to write, draw, and paint with each hand, I unhesitatingly reply—No. Nature has already shown in a long course of evolution that it is desirable to specialize in the use of the limbs. Four primitive flippers of the early vertebrate have developed into propellers and supporters in the mammal, then into the general carriers of the body and the particular servants of the head in man, and now last of all man has learned to use his fore-limbs in an exquisitely adjusted association so that each is the complement of the other.

In conclusion, I would like to add a word on a tendency I have noticed towards the cultivation of educational fads. In my school days the cast-iron "Latinism" of the public school system crushed out all pleasure in lessons, unless I count the joys of the occasional blue and red flares, the bangs and stinks of chemistry demonstrations; but the schools of to-day are by comparison places of delight where true knowledge is so exposed as to excite desire. Modern educational modes step more nearly in the ways of Nature, and in so far as we continue this healthy lead we shall succeed in drawing on the children. Do we take up with fads we shall be as bores to the youngsters and butts for the gibes of the cast-iron pedagogues who, alas! are not yet dead.

A CASE OF CUTANEOUS ANTHRAX SUCCESSFULLY TREATED BY SCLAVO'S SERUM.

BY

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ON November 9th, 1904, a man, aged 31 years, presented himself at St. Bartholomew's Hospital with a small slough on the right cheek. He was a worker in horsehair, and the lesion had all the appearance of a malignant pustule. Bacteriological examination showed the presence, in the clear fluid from the neighbourhood of the slough, of large numbers of bacilli in all respects resembling anthrax bacilli, and the man was therefore admitted to the hospital under the care of Mr. Lockwood. It may be added that cultivations yielded typical anthrax bacilli in large numbers, and that they proved virulent upon a mouse in quite characteristic fashion. The diagnosis of anthrax was thus completely established.

The patient stated that a red spot had first appeared on the cheek on November 5th. On admission his temperature was 101° F. The slough was about a quarter of an inch in diameter, and there was a moderate amount of redness and oedema around it. The glands at the angle of the jaw were enlarged. The lesion was on the right malar eminence, about three-quarters of an inch outside and below the outer canthus of the eye. The usual operation of excision would have entailed considerable disfigurement and probably a plastic operation to avoid ectropion.

The case seemed, therefore, a specially suitable one for

serum treatment, and a supply of Professor Sclavo's serum was at hand, having been provided by Dr. T. M. Legge, of the Home Office, a few months previously. We were unaware of any case previously treated with the serum in this country, but Dr. Legge had reported to us very favourably of the results which he had seen at Siena in the hands of Professor Sclavo. We have since learned from him that the serum had once before been used in England, but on a hopeless case. The present case seems to be the first in which it has had a fair trial.

Forty c.cm. of the serum were injected subcutaneously into the flank and abdomen on the afternoon of the man's admission to the hospital, and no other treatment was adopted. The temperature was then 102.4° F., and it rose in the evening to 103° F., when the pulse was 92. During the night the temperature fell to 98.6° F.

For the next two days the patient showed little improvement. The temperature oscillated between 98.4° and 101.4° F. and the pulse from 80 to 99. The slough increased somewhat in size, but was never larger than a threepenny bit. The surrounding oedema became much more marked, at times almost closing the eye, and the enlargement of the glands at the angle of the jaw increased considerably. There was also some swelling and redness of the fauces. Nevertheless, no new vesicles appeared around the slough, and the patient's general condition was well maintained, giving no ground for anxiety. No further dose of the serum was given.

By November 12th there was distinct improvement. The temperature was normal, the oedema much less, and the glands had decreased in size. On this day a cultivation from the tissues at the edge of the slough yielded no anthrax bacilli. Convalescence was now rapid, but the slough did not come away till November 26th, seventeen days after the administration of the serum. A small granulating surface was left, which appeared likely to leave a scar scarcely more serious than that resulting from vaccination. The patient left the hospital in good health on November 30th.

The serum treatment thus proved, in this case, completely successful, fully justifying the claim made for it by Professor Sclavo. We publish it because we believe it to be the first successful instance of its use in this country. In those cases which have recovered without excision there has commonly been a much more considerable loss of substance than was seen here, and the risk of a fatal issue is considerable. The operation of early excision, chiefly relied on in this country, is undoubtedly successful in the great majority of cases. But where the lesion is on the face, and especially in the vicinity of the eye, as in this case, the advantages of serum treatment are manifest.

THE VALUE OF NITRO-GLYCERINE IN THE PRACTICE OF SURGERY.

BY FRANK ELVY, M.R.C.S. ENG., L.R.C.P. LOND.

THE action of nitro-glycerine upon the arterial walls can be measured by the observant finger at the radial pulse, and a check is thus made upon its general action, almost corresponding to a control experiment, while one notes the local effect upon a diseased part. In the following cases the arterial walls, unnaturally contracted as a sequel to kidney disease, yielded sufficiently to permit of recovery.

ON December 21st, 1900, I was asked to visit W. C., suffering from a swollen hand and insomnia. The patient was a man of 50 years, employed as a smith in De Beers's works. Fairly well nourished, pale of face and with minutely contracted pupils, he gave a history of a rough life, hard drinking, and many attacks of the "horrors," together with "bad kidneys" and frequent suppression of urine. For three days he had passed little urine and had had no rest, owing, he said, to pain in the back. His pulse showed high tension, the radial arteries resembled fine whip-cord. On the left hand were three small spark wounds, the cause, he stated, of the swelling and oedema of the dorsum around the wounds, brawny patches occurring at intervals. The oedema extended to the elbow and the axillary glands were enlarged and apparently tender. The small quantity of urine obtainable was dark and slightly albuminous, the temperature subnormal and general headache complained of. Fomentations were applied to the hand.

ON December 22nd increased cellulitis, bogginess, and a rise of temperature made incisions imperative, and under ether four half-inch incisions were made on the dorsum, followed by fomentations, while strychnine and stimulants were administered throughout.

ON December 23rd I found the man weaker and obviously going down-hill. The hand, more swollen, was now very cold, and pain and sensation lost. The radial pulse on the affected side could not be felt. The skin from finger tips upwards was blanched, with blue and purple patches on the dorsum. The incised wounds had enlarged and gaped

widely, revealing a dry surface covered with dirty-looking sloughs. The condition appeared a typical moist gangrene. The obvious obstruction to the venous circulation by the pressure of oedema might account for this condition, but a deeper origin I believed was present in the contracted arteries. It was only after amputation, apparently his only hope, had been refused by the patient, that a rational treatment by nitro-glycerine suggested itself to me as a certain method of increasing the arterial inflow to the diseased part. That the venous obstruction would be overcome and the condition of stasis relieved was improbable. Nitro-glycerine 100th of a grain was given at 9 p.m. on December 23rd.

The vast improvement the following morning was apparent on December 24th, in the restored radial pulse on the affected side. The yellow sloughs had come away in the dressings. The wounds no longer gaped, while discharging freely a healthy-looking pus. The pallor and purple patches had cleared and sensation had returned completely. To describe the change as one from local death to life would be no exaggeration. It is needless to follow the subsequent history of this case, but it should be stated that necrosis of the index and middle fingers had already occurred, requiring their removal. Recovery was complete, the man returning to work in February the same year.

A brief account of the following case amongst others may be of interest.

A Chinaman, aged 60, suffering from a carbuncle on the neck, was treated by a crucial incision and scraping, under ether, the wound dressed with iodoform and gauze. After varied local treatment, the wound remained covered with a dry yellow slough, the skin and tissues around for an inch or more were swollen and indurated, and below was a chain of enlarged and tender glands. I gave tonics and stimulants as the patient was obviously weak and poorly nourished. The absence of any improvement after a week's treatment, the wiry, high tension pulse, suggested nitro-glycerine as a means of assisting the inflow and outflow of blood to the locally stagnant circulation. I gave the man two tabloids nitro-glycerine, gr. $\frac{1}{16}$, during the next twelve hours. On the following day there was a free discharge of pus from the wound, the slough having disappeared. The pulse was soft. On the succeeding day three tabloids were given. The base of the wound was now clear. The edges gave evidence of healing. My notes record that after giving the drug for ten days the wound had healed.

Not only in incipient senile gangrene, but in all cases of impaired circulation in which contracted arterial walls are present, nitro-glycerine should be of great value to the surgeon. Even when the arteries seemed to be normal, I have constantly used the drug with benefit in local congestion.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, ETC.

THE PREVENTION OF ANKYLOSTOMIASIS.

SIR PATRICK MANSON'S suggestion in the BRITISH MEDICAL JOURNAL of November 5th of the use of tar in the treatment of ground itch of coolies is not altogether a new idea. It has been the common practice of medical officers of tea gardens in the Sylhet district for several years past to treat all early cases of the disease by the free application of Stockholm tar, and the result has been better than from any other treatment. It shortens the illness, checks the spread of the vesicles over the healthy skin, and prevents the large ulcers often seen in neglected cases, and no doubt it would act to a great extent as a preventive if it could be applied to the feet of all coolies before they went out to work. But that is just the difficulty, with Indian coolies at least. They will do nothing to assist and everything to thwart measures directed for their benefit. The tar and sand—sawdust would be very difficult to get in most tea gardens—would have to be applied at least once every day all through the rainy season, and that would be no small task with a working force of 500 and over, even with the active co-operation of the coolies themselves. Dipping the feet in phenyle, the wearing of shoes when working in infected localities, the use of trench latrines, and many other methods have been suggested from time to time and tried in different places, but none has really been successful, owing to the indifference, obstinacy, and obstructiveness of the people concerned. When they are ill they will come for treatment, perhaps, but not before. Anything that is exclusively for their own advantage they are ready to adopt; but anything that is partly for the benefit of their employer they will do little to advance, even if they do not actually resist it. It is this perverseness of nature that annuls all attempts at preventive measures amongst the natives of India, not only in small matters like the subject under discussion, but in vital matters, such as plague, cholera, and the like.

There is another plan of reducing the chances of infection from the larva of ankylostoma in infected ground—namely,

by cutting down the tea bushes in an area round about the native lines, so that the coolies are compelled to go further afield, having now no shelter behind the thick bushes, and the infected plots will be exposed to the drying power of the sun. I have known of this plan being tried with success. I am not, however, trying to throw cold water on the suggestion made by Sir Patrick Manson, to whom all practitioners in the tropics owe such a debt of gratitude, but only trying to show how difficult it is to carry out these things with success.

S. Sylhet, India.

A. B. DALGETTY, M.D., D.P.H.

GANGRENE OF THE SCROTUM.

I REPORT the following case because, in addition to its being one of a very rare character, I should like to know what course I ought to adopt in respect of it.

A. A., a shopkeeper, aged 35 years, unmarried and of good constitution, had never suffered from anything more serious than occasional dyspepsia. He was usually very temperate, but for three days during a feast in cold weather he drank a great deal of native wine. He was then taken suddenly ill with headache, rigors, and general *malaise*, and sent for me. He had a temperature of nearly 106° and a pulse of 125 to 130, but his chief complaint was of intense pain in the neighbourhood of the ischia. There I could find nothing, but I discovered that the left testicle was swollen. I prescribed certain antipyretics which I have found useful and an ointment of belladonna, and then left. In a very short time, however—within a few hours—I was again sent for. I then found the scrotum everywhere enormously swollen, oedematous, and dark. In addition it pitted on pressure, and when palpated fine crackling was clearly perceptible.

I at once made a number of free incisions with a bistoury, evacuating a quantity of frothy blood and serum. Compresses of glycerine of quinine were constantly applied during the next three or four days, and strong tonics administered, but by that time the whole of the scrotal tissues were gangrenous, and had commenced to separate; this separation I completed without the patient feeling anything at all. The temperature after this gradually fell to normal, but the pulse remained very rapid for several days later. The gangrene only extended slightly to the perineum and neighbouring parts. The net result is that, though the patient has recovered and the perineum is cicatrizing, the two testicles hang separate, supported only by their respective cords. They show some tendency to adhere to one another, but I should be glad of suggestions as to the best way in which to treat them. The occurrence of this rapid local gangrene of the gas type is remarkable, and I am quite unable to account for it.

Mytilene, Turkey.

C. MOZURELLI.

TREATMENT OF PHTHISICAL CAVITIES WITHOUT OPERATION.

WITHOUT entering into the question as to whether the pyrexia of pulmonary tuberculosis is or is not always the result of a secondary infection of the lungs by pyogenic micro-organisms, I think it will be agreed that when we find pyrexia along with a cavity in the lung, one possible explanation of the temperature may be found in the supposition that the contents of the cavity have become septic, and that the cavity is not draining freely. If this be the case, the removal of the septic matter becomes a question of first importance. Operative drainage of these cavities is a proceeding of such gravity that it occurred to me, some time ago, to try if the cavity could be emptied by merely placing the patient in a suitable posture.

An opportunity presented itself in the person of a male patient at the Ventnor Hospital. His temperature was about 102° F. every evening; he had great dyspnoea; he was extremely feeble, and did not seem to have a much longer time to live. The physical signs in the region of the angle of the left scapula pointed to the existence of a choked cavity, and the symptoms of the case suggested that the contents of the cavity were septic.

After two weeks had passed, during which the patient steadily lost ground, I removed his pillow and bolster and raised the foot of the bed 6 in., directing him to keep his head low. Nothing particular happened for about four hours. He then had a very violent fit of coughing which lasted quite half an hour. Being in a very weak state he became rather alarmed and was somewhat exhausted, but he had coughed up 4 oz. of sputum which differed from his expectoration at all other times in that it had a very offensive odour.