does, upon loss of blood, although this is certainly one important factor in it.

As the blood-vessels must be secured with all possible promptitude, torsion of the arteries is scarcely, I think, applicable, as it requires more time than the ligature. It is better to apply forceps in quick succession to all bleeding points, and afterwards ligature them. I tied the femoral artery and vein with silk, and the other vessels with catgut, and cut the ends off short. All bleeding veins were tied. It saves loss of blood at the time of operation, and diminishes the chance of subsequent oozing of blood into the cavity of the stump, and is in no respect hurtful in itself.

The catgut sutures, inserted very deeply into the flaps to bring their surfaces well into contact, required no subsequent extraction. The external portions, with the knot, were dried up, and were picked off the surface in three to four days. The deep loops were no more seen; there was not a trace of inflammation or irritation around the points of emergence of the sutures. The drawing accurately represents the form and condition of the stump eight weeks after the operation.

The operation, severe though it be, was justified by the relief from pain which the patient has received, although the probability of a speedy return of the disease in some internal organ or part is only too likely. No clue is given by this case as to the possible origin of these deadly growths. This young man had been, to all appearance, thoroughly healthy himself, and his father and mother were the same. There was not even an injury which might be alleged as an exciting cause. The supposed obscure connection or interdependence between sarcoma and syphilis, or tubercle, has yet to be proved.

CHRISTMAS AT DAVOS PLATZ.

By C. THEODORE WILLIAMS, M.D., F.R.C.P.,

Physician to the Hospital for Consumption and Diseases of the Chest, Brompton.

THE treatment of certain forms of pulmonary consumption by a winter residence in high altitudes having become more and more common among physicians, the results are discussed not only by medical men, but by the public, who grasp eagerly at any novel idea which holds out the prospect of a cure for this disease.

Among the mountain winter-stations of Europe, Davos Platz, in the Grisons, bids fair to become the most popular, as the influx of visitors

from many nations yearly increases, having doubled since last winter, and as accommodation is being now prepared to meet, as far as possible, the requirements of the future; therefore, a few impressions, noted on the spot, may be of interest to the readers of the BRITISH MEDICAL JOURNAL.

My objects in visiting Davos were—firstly, to realise the exact conditions of life in this high altitude in winter; secondly, to ascertain the effects of the climate on patients whom I have sent there.

After a journey of twenty-two hours from Paris, we reached Landquart, and the next morning, December 19th, we set out, in a covered sleigh, during a snowstorm; ascending the Prättigau valley, all smiling in summer, but now snow-laden and bristling with icicles, we reached Davos in seven hours and a half. There we were well lodged and warmed, but found that the weather had been miserable during the past month, and that, owing to the absence of sunshine and prevalence of wind, invalids have been much confined to the house.

Next morning, the snowstorm was over, the sun shone out in all its glory, and the broad valley, in its winter garb, looked far more beautiful than I had ever seen it in summer; the near mountains, which then are not remarkable for beauty of outline, now standing forth in bold grandeur, the pine woods and the dark peaks of the Schwartzhorn and Tinschhorn relieving the dazzling whiteness of the scene.

It being a "Sitztag", numbers of invalids were sitting out, well wrapped up, and armed with blue spectacles, in the open balconies facing south, to enjoy the warmth; whilst others, more robust, were taking their six-mile walks, or skating on the rink, or else "tobogganing", in the Canadian fashion, down the snow-slopes. Ascending a hill on one side of the valley, I soon found it hot enough to be glad to rest on a seat; and, as far as my sensations were concerned, I could have dispensed with a greatcoat. The radiation-thermometer (black bulb *in vacuo*) indicated 134 deg. Fahr., though the maximum of the ordinary thermometer in the shade was 21 deg. Fahr., the minimum that night being as low as -4 deg. Fahr.

The snow does not appear to melt much under the sun's rays, and is more powdery ("salzig") than in England; it shakes easily off one's clothes, and leaves no moisture behind. As the sun sinks, the scene assumes that beautiful succession of tints familiar to Alpine climbers—golden and pink and purple, and lastly cold grey; the twilight, morning and evening, being incredibly long. In fact, the phenomena witnessed in summer on the glaciers are seen in winter throughout the whole of the high valley.

From my friend Mr. Gunnery's excellent observations, I find that in the month of November the maximum in the shade varied from 26 deg. Fahr. to 45 deg. Fahr.; the minimum from 37.5 Fahr. to 8 deg. Fahr.; whilst the radiation-thermometer gave, according as the sun was visible or not, from 44 deg. Fahr. to 157 deg. Fahr. The barometer readings were between 24.40 and 25 inches—figures testifying to the high altitude, which is 5,200 feet above the sea-level. The hygrometrical observations show a difference of between two to three degrees between the bulbs. On November 25th, the "Föhn" (south wind) blew, and a thaw commenced, lasting three days, to the great discomfort of invalids; such an event, during the six winter months, being almost unprecedented. The winter has as yet been unusually severe, owing to absence of sunshine, which is the one heating influence of Davos. The hotels are well built, either of stone or of thick wood, are provided with double windows, and the rooms often wainscoted; they are warmed either by steam or hot-water pipes, or by ordinary German stoves, by means of which a sufficiently high temperature is maintained night and day.

Of the 650 visitors, there are 180 English, of whom about one-half are invalids. Most of these are doing fairly well; but there are a certain number of advanced cases who have come here, as a rule, contrary to all medical advice, and should never have left their homes.

Hearing that several deaths had occurred, I obtained a list from the official registrar of all which had happened since August 1st, 1878. They were 15 in all, including 4 English and Americans; of whom one died two days after arrival, and one one day. This does not include one or two cases who died after leaving Davos.

Though there is much grumbling at both weather and food, the mass of the patients seem to be doing well; and some of those I examined with Dr. Raedi, during my four days' stay, surprised me by their rapid improvement during two or three months' residence. Without going into particulars, I may state that I noted marked increase of appetite and gain of weight, with augmentation of muscular strength. The pulse is somewhat quickened and the respirations slightly increased; but I did not notice any marked expansion of the thorax, which has been observed by some authors. The physical signs in both first and third stage cases of phthisis showed a remarkable diminution of dullness, indicating either the development of emphysema or absorption of pneumonic products. Contraction of cavities appears to proceed somewhat rapidly

here. But the climate seems to tell most on the heart's action, which becomes more and more excited, though, curious to state, the number of cases of hæmoptysis, even in phthisical patients, is very small.

CLINICAL MEMORANDA.

THE SCARLATINOID RASH OF ICHORRHÆMIA AND SEPTICÆMIA.

THE question raised by Mr. May, jun., of Reading, in the JOURNAL of December 21st, 1878, is a very interesting one, and has exercised the minds of many in late years; and I believe obstetricians generally admit that a rash simulating, or nearly so, that of scarlatina may be produced by the absorption of unhealthy material; and it is just this which makes it difficult in any given case to say whether the rash be one symptom of scarlatina-poisoning, or the effect of the absorption of some deleterious matter. When, after the strictest search, one has been unable to trace any exposure to scarlatina, the evidence is yet only negative; and, in scarlatina proper, how many cases daily occur where no evidence of contagion can be found!

But the following case is more interesting and conclusive even than the one quoted by Mr. May (because it might be said in his that there had been inoculation), and is curious as having occurred in the same town. My son was at school at Reading in 1873, and was seized with a severe attack of pyrexia, and on the second day with delirium, with a rash all over him very like that of scarlatina. There was no particular redness about the throat, though it was somewhat blushed. As he was delirious, we could not gain much information from him for the first three days; but, as this passed off, he complained very much of the right buttock, near the tuberosity of the ischium, which region was fuller than the other. Suffice it to say that this proved the commencement of a very large deep-seated abscess, which had to be opened. Inquiry as to the cause showed that, while he was standing a day before with his legs wide apart, a schoolfellow had still further stretched them out by pulling at one. The rash lasted about three days; was nearly universal from the first; but was not followed by any desquamation of the cuticle. But this symptom of exfoliation is nothing characteristic of scarlatina; any other inflammation, to an equal extent, of the same parts will produce it.

Here we have a simple strain of the muscles and fasciæ producing, without the smallest external abrasion or wound, a rash having so much resemblance to that of scarlatina that at first it was doubtful how far it was scarlatinal. Here was no question of inoculation. That highly irritating material can be effused into the cellular tissue, as the result of traumatism. I had once abundant evidence in myself. In my younger days, my horse fell; I came down on one hand, producing a partial displacement of the bones, which I recovered quickly by violent muscular movement of the forearm. Great swelling shortly took place about the wrist. But, about two days afterwards, I suffered from most severe inflammation of the lymphatics, both in front and back of the arm up to the axilla. There was not the smallest scratch on the skin or hand. This is somewhat in accordance with the observation of Mr. Callender, that the ichor effused after the closing up of a surgical wound is very irritating.

These cases can be viewed another way; namely, that, a wound or damage existing, the presence of the exanthem in the system so disturbs it that, instead of natural recovery ensuing, the part runs on to suppuration. In the case of my son, there had been at the school no case of scarlatina for a long time, nor was anyone affected who afterwards came into contact with him.

But, in the case of wounds followed by a rash, one cannot avoid enlarging our inquiries as to the capability of scarlatina being transmitted by inoculation; and also, where if it can, what are its features when so received. I trust observations will be continued on this subject. I may add that Mr. Maurice of Reading, who most kindly attended my son through the acute stages, has the details of the case.

J. BRAXTON HICKS, M.D., F.R.S.

DOES SEPTICÆMIA OCCASIONALLY SIMULATE SCARLATINA?

I SEND further details of the progress of the cases published on December 21st, 1878. The child operated on for deformed tibia was removed to a separate ward, but connected with the general female ward, on November 30th. On December 3rd, my colleagues yielding to my arguments, the child was returned to the children's ward. The next day (December 4th), a child was operated on for the radical cure of hernia. The same afternoon he began to vomit, and the following day was very

restless, with a pulse of 136. On December 6th (about forty-eight hours after the operation), a rash appeared on the chest and arms, the abdomen being tense and painful, and the next morning he died.

On December 15th, two cases of scarlatina occurred in the general ward; and, on the 17th, three cases in the children's ward.

In the schoolboy, desquamation commenced on November 27th. On December 4th, I was asked to see a servant at the school; she was suffering from slight sore-throat, which soon got well, without any trace of a rash. She was not allowed to go near the boy, but had worked under the room in which he was living. To-day (December 21st), she is suffering from the dropsical condition which follows scarlatina.

These results are very interesting and important; they show the importance of treating all such cases with the greatest precautions against infection; and, although they do not prove that all septicæmic rashes are scarlatinal, they completely refute my opinion, that I could diagnose the difference. They also go far to confirm Sir James Paget's opinion, that patients suffering from physical injury are more susceptible to scarlatina, and also develop the symptoms more quickly. At the school, no case had occurred for a whole month, and the only boy infected out of one hundred pupils is one who suffered from inflamed lymphatics.

Again, the four children at the hospital were exposed to infection at the same time; but the one operated on showed the rash within three days of infection; the other three not until the ordinary period of incubation had expired.*

GEORGE MAY, jun., Reading.

SURGICAL MEMORANDA.

CHOLECYSTOTOMY.

THE publication, in the JOURNAL for December 21st, 1878, of a communication from Mr. George Brown, entitled "On the Treatment of Dropsy of the Gall-Bladder by Operation, with Notes of a Successful Case", in which the author refers to a paper by Dr. Thudichum (reported in the *Lancet* for October 22nd, 1869), and to a case recently published by Dr. M. Sims (BRITISH MEDICAL JOURNAL, June 8th, 1878), induces me to refer any of the readers of the JOURNAL who may feel an interest in the surgery of this subject to an excellent paper by Petit published in 1743 in the *Mémoires de l'Académie Royale de Chirurgie*, tome I, p. 255, etc. Petit's paper is entitled "Remarques sur les Tumeurs formées par la Bile retenue dans la Vésicule de Fiel, et qu'on a souvent prises pour des Abscès du Foye". This excellent surgeon states the differential diagnosis between abscess and distension of the gall-bladder by bile; traces this latter to obstruction by gall-stones in some instances; draws a parallel between these and retention of urine from a calculus blocking the urethra; and from this deduces appropriate surgical measures. The paper is illustrated throughout by cases.

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ON EXCISION OF THE ANKLE-JOINT.

I AM glad to see that the above operation is attracting the attention of surgeons. I believe it will more often prove a good substitute for amputation than is generally supposed. The dictum of the late Mr. Syme—that caries is very apt to recur in the small bones of the foot left after partial abscission—though true in some, may not be so in all instances, and I would specially exempt excision of the ankle. I include in this a partial, and not entire, removal of the astragalus. My reason for thinking more favourably of excision than of amputation for limited disease, lies in the fact that by it an useful foot with sound elastic arches is preserved, while the weight of the body is still distributed in due proportion to, and in the lines of strength of, the different bones. In partial amputations and after removal of the whole astragalus, as suggested by Mr. Holmes, the latter conditions would scarcely exist. Unnatural pressure is probably a fruitful source of caries. In the two instances in which I have performed this operation for disease, lapse of time has shown the value of it.

C. F. MAUNDER, Surgeon to the London Hospital.

RESECTION OF THE ANKLE-JOINT.

UNDER what circumstances should chronic inflammatory disease of the ankle-joint, in a patient of the labouring classes with marked strumous constitution, be treated by excision?

1. If the disease be confined to the synovial tissues in pulpy disease, is resection justifiable?

* By an error, the first recorded case (see the last line of my previous article) is said to have occurred in 1876, instead of 1786.