No malarial parasites were found in any of the cases, and quinine internally had no effect whatever on the course of the disease. Sandfly fever was excluded, both by the course and symptoms of the disease, as well as by the absence of the causative agent.

Recently I have been struck by the similarity of this type of fever to one described in some recent numbers of the JOURNAL OF THE ROYAL ARMY MEDICAL CORPS by Colonel Firth and other officers, under the heading of "Paratyphoid Fever," and attributed by them to infection by the *Bacillus paratyphosis A*. The symptoms and course of the disease as described in the Journal are practically identical with those met with in Tientsin, and which, up to date, have been returned under the heading of "Pyrexia of Uncertain Origin." Owing to the absence of any laboratory in North China, it has not been found possible to carry out the necessary technique required in an examination of the blood to isolate the bacillus. If, however, any further cases should be met with, it might be possible, by sending down specimens of blood to the Shanghai Municipal Laboratory, to further investigate these cases and, if possible, discover their true nature.

Many of the soldiers who were down with this fever last year had been quite recently (within twelve months) inoculated against enteric. Therefore it would seem that anti-typhoid inoculation conferred no immunity on the individual against this type of fever. The convalescence of these cases has always been rapid and uninterrupted.

A REVIEW OF THREE YEARS' SURGICAL WORK AT LUCKNOW.

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OPERATIVE surgery in this station is limited when compared with the work done at a large military hospital at home. In the first place many operations, such as radical cure of hernia, removal of varicose veins, and so on, are not often required, as the majority of cases are discovered before leaving England and are dealt with there. Then, again, it is only during the cold weather that many operations are performed. During the summer months the climate of Lucknow is extremely trying, so operative treatment during this season is, if possible, avoided. Altogether 225 major operations have been performed; of this number, 187 are what I call, for want of a better term, "routine operations," that is to say, the ordinary operations that one is called upon to do any day in a military hospital. The remaining thirty-eight were operations of more or less difficulty, and

I do not propose to deal with them now, as the object of the present article is to describe the general method of work in the surgical department of the hospital, rather than to go into details of cases.

Lieutenant-Colonel Thompson, the officer commanding the hospital, holds strong views, with which I thoroughly agree, regarding the rôle a surgical specialist should fill in a military hospital. He considers that the surgical specialist should be responsible, certainly, for all surgical work done; but, that his chief function should be to assist and help other officers with operations. In other words, he should be a teacher. He maintains that as many officers as possible should learn to do routine operations; and that it is not so much the few so-called experts that we require in the Army as many well-trained surgeons, who can do any simple operation that may be wanted.

For this reason he attaches a junior officer for about six months to the surgical wards. This officer has charge of the wards, working under the surgical specialist. The general plan is for him to assist at operations at first, and, when he has learnt the methods, to do most of the "routine operations" himself.

The following are considered "routine operations": Hernia (radical cure), appendicectomy, evacuation of liver abscess, removal of loose cartilages, hydrocele, varix, and varicocele.

Technique.—We carry out much the same methods here as I described in the Journal a few years ago, and I do not propose to go into the matter further, beyond saying that tincture of iodine is now the only preparation used for the skin, and that beyond this no dressing is, as a rule, applied to the wound in aseptic cases.

Anæsthetics.—Chloroform has been given in the majority of cases. It has been used nearly 1,000 times without a casualty. Practically all extractions of teeth are performed here under chloroform. The routine is for the man to be detained for the day before, and to be "prepared" as for a major operation. This is, in my opinion, essential. Anæsthetics are given by all officers in turn.

Surgical Dressing-room.—When going over a hospital in Japan some years ago, I noticed that no dressings were done in the wards. They were all performed in a special dressing-room. The idea struck me as good, and I determined I would adopt it when I had the chance. It has the following advantages:—

(1) The ordinary work of the ward is not interfered with.
(2) It does away with the necessity of screens.
(3) Dressings and instruments are more directly under your eye.
(4) It is a great saving of time.

Patients who cannot walk are brought down to the dressing-room on a stretcher. They are dressed under supervision by the assistant-surgeon in sub-charge of the ward. An orderly is in charge of the dressing-room, which is equipped with the necessary instruments, &c. At the end of the

morning's work the room is cleaned, fresh dressings put out, instruments are boiled, the room locked and the key handed over to the assistant-surgeon on duty. In this room he also treats all surgical emergencies that may occur during his tour of duty.

Technique.—The same principles are applied as in the theatre, that is to say, everything is freshly sterilized daily, oftener if necessary. A few simple hints to orderlies are hung up in the room, and are closely adhered to. In these hints it is pointed out that all cases, whether suppurating or not, should be treated with the same attention to surgical cleanliness; that no wounds should ever be handled; how to render instruments aseptic by "flaming," and so on.

Bier's Method.—The following general principles of treatment are observed: In septic wounds Bier's bandage or cupping is applied, $\frac{1}{3}$ of a Martin's bandage is quite long enough for the venous congestion treatment. For cupping, the ordinary wet cupping apparatus is used, but an aspirator is found more convenient for exhausting the air than the ordinary cupping pump. During intervals of treatment hot fomentations are applied.

Salt Solution.—This is used in lieu of, or in addition to, Bier's treatment. The solution is that recommended by Sir A. E. Wright—viz., 2 per cent sodium chloride and 0·5 per cent sodium citrate. The rationale of this treatment is as follows: The sodium citrate attracts the leucocytes to the part, and the sodium chloride increases their phagocytic action. The results are excellent, far better than can be obtained by antiseptics. In certain cases it has been found necessary to employ vaccines, but in most cases healing is satisfactory under the above methods of treatment. Salt solution is difficult to keep aseptic. It will not keep sterile for long if exposed to the air. The method we adopt here is to keep the solution in a copper receptacle. This vessel is a cylinder of the capacity of a quart, fitted with a tap at the bottom. It has a deeply flanged removable lid, which is secured back and front to the cylinder by padlocks, the keys of which are kept by the theatre orderly. The latter fills the cylinder, places it in the Thresh disinfector, and, after sterilizing it, puts on the lid, locks the padlocks, and issues the cylinder to the dressing-room. A couple of these cylinders are in use, which allows for re-sterilizing daily.

Saline Ointment.—For burns and abrasions, in fact any wound which requires a non-adherent dressing I use the above-mentioned ingredients in the form of an ointment, made up with boiling vaseline. This is spread on suitable-sized pieces of lint, which are put up in cigarette tins and sterilized in the Thresh disinfector before being issued to the dressing-room. When wounds or abrasions become aseptic they are closed with collodion.

Surgical Out-patient Department.—This is an important adjunct to the surgical department of the hospital. It is much more satisfactory

to treat slight surgical cases at the hospital than in the inspection rooms in barracks. The work is done in the dressing-room described above. The system of working is as follows: All cases first attend the medical inspection rooms in the lines. Should the medical officer in charge of the latter consider a man requires surgical treatment, he writes on the sick report "attend station hospital." The man's name is then taken off the sick report and placed on the roster of those attending the hospital out-patient department, and he is kept on this until fit for duty. Cases from distant barracks are brought to hospital in a tonga. About 1,000 fresh cases per annum attend the surgical dressing-room as out-patients, and it has fully justified its establishment.

AN INVESTIGATION TO DETERMINE CERTAIN CHARACTERISTICS IN THE PHYSICAL EQUIVALENTS OF LANCASHIRE RECRUITS.

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My attention has been drawn to the low weights prevailing in this district in normal healthy individuals. This is noticed in school children, e.g., at age 7, although the height is slightly above that seen in children of the same age, taken as a whole, in Great Britain, the weight is very much below that of the average of the whole country. Again, the same thing is seen at age 13, the height at this age being about the same as in children throughout the country:—

Age in years	Height		Weight	
	Great Britain	Burnley	Great Britain	Burnley
7	44·60	45·60	50·70	45·70
13	55·81	55·10	79·0	75·3

No records are available to compare ages from 14 up to 17.

In the following analysis 918 recruits found medically fit are taken as the sample. They are taken from the periods 1907-11, and the results obtained are compared with the official figures as published by the War Office for the year 1909.

All the recruits under review were born in Lancashire, and were resident in the recruiting area of Burnley and district.

Burnley may be taken as a typical industrial centre having a population of over 106,000, of whom 30,000 are engaged in cotton weaving, over 4,000 in coal mines, over 2,000 in ironworks, and about 2,500 in building and works of construction. Of the 918 recruits under review