In the case of a congenital hernia, it is advisable to close by a ligature the upper end of the portion of sac which it is intended to leave.

It will be seen from this description that it is not considered necessary to isolate or remove the whole of the sac. Only sufficient is detached to enable it to be dealt with in the later stages of the operation.

The assistant now holds the cord with a piece of gauze, and draws it steadily downwards, while the operator draws the sac in the opposite direction and strips it off the cord. This isolation is systematically done, each aspect being cleared in turn, and all purposeless tearing is avoided. The stripping is continued until the sac is seen to widen out into a funnel, and the epigastric vessels are either seen or felt on the inner side. I do not think the importance of isolation to this extent can be exaggerated.

There are a few operators who are content with ligature of the sac at the external ring, or a little above it. In my opinion such "radical cure" will be very likely to relapse. I think we cannot depend on any operative measure which does not entail ligature at the very highest point, and this can be easily identified by the presence of the epigastric vessels. For cases of large hernia with a very dilated inguinal canal it is necessary to narrow the latter by some method such as Bassini's, but I think in other cases it is quite unnecessary, provided one has dealt with the neck of the sac at the internal ring.

Having fully isolated the sac, and ascertained that it is empty, transfixion is made from the inner side, so as to avoid puncturing the epigastric vessels, and a Staffordshire knot put round the sac, traction in a forward direction being made while it is being done. I always use kangaroo tendon for this purpose. The sac, in the twisted position, is then pulled upwards under the free edge of the internal oblique and through a hole made in this muscle by carrying the needle through the twisted sac. This causes a convexity on the peritoneal surface.

The operation is completed in the usual manner, but if Bassini's method is used the cord must be lifted from its bed first, in order to pass the sutures behind it.

A SYSTEM OF SANITARY CONTROL FOR MILITARY CANTONMENTS IN INDIA.

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This subject is of such vital interest to the Army in India that no excuse is required for my bringing to notice a scheme of sanitary supervision which I have found work smoothly and with good results. During a long experience of Indian cantonments, I have found, on joining a station for duty, that rarely was there a complete record of
sanitary defects and recommendations for their improvement; neither were there any easily accessible means of finding out the steps taken to remedy the defects thus pointed out. Some stations have a sanitary book for use in the station hospital, seen only by the officer commanding the hospital and the officers doing duty under him, and which is seldom kept up; or there may be files of weekly sanitary reports, to which little attention is paid. These latter mostly consist of mere statements of certain routine inspections having been carried out. It thus happens that the senior medical officer, who is the real health officer of the station, has no ready means of making himself acquainted with the state of his charge or the work of his predecessor. He may laboriously wade through the sanitary book, files, and perhaps letter book, and still be ignorant of many matters of importance in connection with the health of the troops in his new charge.

The system of control that I now bring to notice I found in partial operation in Wellington, Madras, about the year 1898, so that I make no claim of being its originator. So impressed was I with its utility, that I introduced it into two of my three subsequent large stations, with, I think I may say, much success and great benefit to general sanitation. The “Station Sanitary Register” is kept as follows: A large copy book—1 A.F.Z. 2067 is suitable—is taken into use, the left-hand page being for the weekly sanitary report of the assistant sanitary officer who is the officer in charge of the cantonment general hospital. The right-hand page is ruled to form four columns under the headings of “Senior Medical Officer of Station,” “Cantonment Magistrate,” “Garrison Engineer,” and “Officer Commanding the Station.”

The usual routine is that this register is passed by the senior medical officer, with any necessary remarks, to the different officers concerned, and finally to the officer commanding the station. At Lucknow there are about twenty-two different garrison institutes, dairies, markets, mineral water and ice factories, &c., to be inspected. A numbered list of these is kept in the first page of the Register, as also a similarly numbered tab which can be moved as required. The report thus gives each institution under its own number and in its usual order. The book then becomes a permanent and easily accessible record of the sanitary work in the cantonment, and a relieving senior medical officer or commanding officer of the station can soon acquaint himself with the work of his predecessors, a thing that was almost impossible under the old system of reports.

Besides the “Station Sanitary Register,” a similar “Regimental Sanitary Book” is in use for each unit in the garrison. After the weekly report is completed by the medical officer in charge of a corps, the senior medical officer makes any remarks he may consider appropriate, and forwards it to the officer commanding the corps for his information and action. There are here five British units, and on the departure of any one of them the sanitary book is passed on to be used in connection with
the relieving troops, so that it is in a great measure a record of the sanitation of the lines rather than of any particular corps. The practice I have carried out ensures that medical officers will be in direct communication with the officer commanding, as his sanitary advisor, and not, as frequently occurred under the old régime, of communicating with him through the quartermaster, a junior regimental officer, or the pioneer serjeant. Without exception my experience has been that commanding officers fall in readily with this scheme, and prefer having sanitary suggestions and recommendations at first hand, if these are made in a tactful and in a reasonable manner.

I claim for the scheme:—

(1) A concise and accessible record of sanitary work.
(2) A great saving of clerical labour, in that no other office record, letter book, &c., is required in addition to this Register.
(3) It brings the commanding officer into more immediate touch with his sanitary advisor.
(4) It leads to a vast improvement in general sanitary supervision.
(5) It is of great assistance to the senior medical officer in enabling him to become acquainted with the methods of working of the medical officers doing duty under him, and to co-ordinate those methods without interfering with individual initiative or any original measures that may seem advisable and feasible. He can see that medical officers work on a more or less uniform system, and prevent the recommending or carrying out in different parts of his sanitary area of measures which may be opposed to one another.
(6) The continuous record will enable sanitary officers to avoid the pitfall of making recommendations at variance with those previously made, as often occurs in small matters of detail. This latter often brings discredit on our corps, as regimental officers will often not understand that frequently there are many different ways of reaching any particular goal, and may possibly consider it another instance of "doctors differing."
(7) Persistent disregard of recommendations or obstructions on the part of responsible officers is shown up in a manner that sooner or later brings its own condemnation.

As perhaps the most prominent part of this scheme, I would insist on the importance of the position of the senior medical officer as the health officer of the station, supervising all, seeing that all recommendations are reasonable, and that the different medical officers conform to a general plan of working suitable to local requirements.