ventricle–2, and inter-auriclar septum–2. Of primary sarcomata of the heart, till the publication of Bradley and Maxwell's paper, the number reported appears to be 38. So far as the histology of these sarcomata is concerned, the following are the figures given with regard to 31 cases investigated:—round-celled–10, spindle-celled–12, giant-celled–4, myxo-sarcomata–3, angio-sarcomata–1, and lympho-sarcomata–1. It appears from the *Quarterly Cumulative Index* that up to October, 1930 four more papers, three German and one French, have been contributed on the subject. These papers, however, were not available to the writer. From the literature consulted no case of cardiac neoplasm appears to have been reported so far in India. The case here reported is also rare in that there are only two cases reported of cardiac neoplasms affecting both the right auricle and the right ventricle. Also of the sarcomata, the histology of which has been quoted, only ten have been reported to be round-celled.

It is unfortunate that no clinical history worth the name could be obtained in this case, but the outstanding complaint was a severe dyspnœa. In this connection it will be interesting to note a case of "primary round-celled sarcoma of the heart—probably a lymphosarcoma" reported by Steele in 1926. This was in a well-nourished woman of 40, who suffered from frequent attacks of breathlessness and was in constant distress. The dyspnœa could only be controlled temporarily with morphine. Autopsy revealed a sarcomatous growth in the wall of the right auricle, which also involved the superior vena cava.

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AN ANÆROBIC URINAL.

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IN almost all barracks a movable pail or receptacle is used as a night urinal. This is placed outside the barrack room and removed every morning by a sweeper. Such urinals necessitate a great deal of labour and supervision, in spite of which they cause a certain amount of nuisance as regards smell, and may prove to be the origin of a typhoid epidemic if neglected.

The same may be said of the day urinals, which require to be emptied daily, and need to be tarred and scrubbed regularly. If not attended to in this way, even for a day, the smell emanating from them, specially during summer, is intolerable. The same applies to urinals of public institutions, such as schools, clubs, and parks where the receptacles in use require attention several times a day.

To obviate the necessity of the constant attendance of a sweeper, one of us (R. C. W.) suggested the following design:—

The receptacle consists of an iron pail of 15 gallons capacity (or more according to requirements), which has a brass tap about two and half an inches above its ground level. The tap terminates internally in a bent tube about two inches in length, almost touching the internal wall of the receptacle. The usual funnel arrangement serves as a antisplashing device

(see diagram), the tube of the funnel extending almost to the bottom of the pail.

Before use the pail is filled up to a height of one inch with water, on top of which is floated a layer one inch in thickness of equal parts of crude and kerosine oil (the cheapest variety available). The funnel on its inner surface is coated with tar or crude oil.

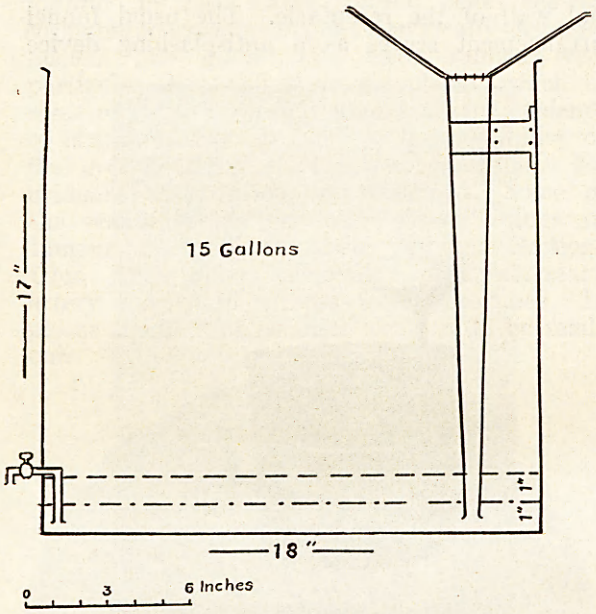
When the urinal is full the tap is opened and urine allowed to flow into a bucket, to be disposed of according to the system in vogue in the station. The renewal of oil is not necessary for months as the oil does not flow out owing to the bent tube attached to the tap; but some kerosine oil may be added once a month in very hot climates, as the paraffin oil has a tendency to evaporate.

The device described above will not require any attention for at least a week if used by six adults day and night, but for a larger number of people, more receptacles may be installed, or the same principles may be applied for construction of larger pails. In clubs, parks, schools, etc., the above standard-size

urinal would not fill up for a long time as it would be in use during a part of the day only.

I. Practical experiments with the above urinal.

Three urinals of the above pattern were constructed and installed, two in a family of two adults and two children, and one in the laboratory for use of the staff. These have been in regular use and constant observation for over a year. There has been no smell or nuisance of any kind, the laboratory one being used by three adults during working hours only, required draining once a month only.



It may be added here that at the time of the removal of the urine, the smell is undoubtedly bad, but in a well-aired latrine when the urine is removed it does not linger long. Thus if there is any nuisance it is not oftener than once a week.

II. Bacteriological findings.

(1) A broth culture of *B. typhosus* was introduced daily into a glass model of the urinal, which consisted of an inverted bell jar containing fresh urine covered with a layer of the oil mixture. For three consecutive days samples of the urine were withdrawn and used for isolation of *B. typhosus* with a negative result.

(2) A series of six similar experiments were carried out in the standard urinal described above, *viz*, after adding about 500 c.cms. of broth culture of *B. typhosus*, attempts were made to isolate the bacilli by inoculating both solid and fluid media with a sample of the urine every day.

The results were all negative, except on one occasion when an organism biochemically and morphologically resembling *B. typhosus* was isolated on the first day (but never after). This organism differed from the original strain introduced, in respect of agglutination, requiring subculturing for a week before it was agglutinated by the homologous high-titre serum.

The negative results were probably due to the antiseptic action of the sulphur compounds present in the crude and kerosine oils, as well as the high alkalinity of the urine stored under anærobic conditions. From the fifth day onwards after installing and using the urinal, the reaction of the effluvia was strongly alkaline. (It required 60 c.cms. of N|I sulphuric acid to neutralise a litre of the urine.)

Summary.

1. The construction of an anærobic urinal is described above.
2. It is economical, in that it requires attendence by a sweeper only once a week, and even not so often if larger receptacles are constructed. It may not require attention for months if a central tank is constructed on the above principle, to which urinals are connected by a pipe line. The conversion of the receptacles in common use in the military barracks does not cost more than five rupees.
3. Mosquito and fly breeding is impossible in the contents and neither can the flies feed on the urine and broadcast the pathogenic organisms.
4. Urine being considered the most infectious agent excreted by typhoid carriers, the introduction of this urinal should be encouraged, as it kills the pathogenic bacilli through the natural putrefaction by alkaline effluvia and by antiseptic action of the surface oil.

AN OPERATION FOR UTILISING THE MIDDLE FINGER AS THE "TRIGGER" FINGER.

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NOT infrequently it happens that as a result of an injury or infection a soldier has to be invalided out of the Army on account of the partial or total loss of the index finger, or of its impaired mobility through ankylosis of the smaller joints. Though the injury is often trivial and the man is perfectly fit otherwise, not being able to grip the rifle and pull the trigger efficiently, he is useless as a soldier. To lose an otherwise healthy man simply for disability of the index finger is a great loss to the Army. It is an economical loss as well, because the man has to be pensioned off.

I have, on several occasions, done the following operation for these men and am quite satisfied with the results.

In immobility of the joints of the index finger or loss of one or more of the phalanges, it is best to amputate the finger altogether; otherwise the finger or the stump will always be in the way of the free movement of the middle finger while pulling the trigger or manipulating the bolt.