Given four such vehicles (motor) fitted up on these lines to work in the evacuating zone, we should find the question of clogging greatly diminished; they could be used between the field ambulances and clearing hospital during an action; or, if necessary, work between the evacuating zone and distributing zone; they could be utilized to move the equipment of the clearing hospital forward as the field ambulances advance.

To convert an ordinary van, without lockers or ventilators, the following would be required: Twelve uprights, 7 ft. x 3 in. x 2 in.; twenty-four battens, 15 ft. 6 in. x 2 in. x 1 in., to form rails; sixty iron angle brackets, 3 in. x 3 in. x 1 in. x $\frac{1}{2}$ in. ($\frac{1}{2}$ in. would do); thirty-six dozen screws, 1½ in., for fixing brackets and making rail.

If the sides of the van are sufficiently strong, the brackets may be screwed thereto, thus saving six uprights.

INTERESTING CASES OF ABDOMINAL SURGERY.

A CASE OF ABSCESS OF THE LIVER.

By Captain R. H. Bott.

Indian Medical Service.

J. H. E., a European, aged 40, with twenty-one years' service in India, was admitted to the Station Hospital, Quetta, on December 17, 1909, complaining of great pain over the region of the liver.

History of the Present Condition.—Patient stated that he first noticed a pain over the region of the liver on December 8, 1909, it lasted about half an hour. Four days later he had a slight feverish attack with shivering and sweating, the next day he had another rigor and profuse sweating. There was no history of dysentery.

Condition on Admission.—He complained of great pain in the right side over the region of the liver. The application of hot fomentations relieved this temporarily. Temperature, 101.6°C; pulse 84; respiration 20. The following morning his temperature was 99°F. On examination no enlargement of the liver was made out, and no tenderness over the hepatic area. There were some small crepitations at the base of the right lung. That evening his temperature rose to 101°F., he had a rigor and became very collapsed. His blood was examined for malarial parasites with a negative result. December 19, 1909: Pulv. ipecac., gr. xx, administered. Suspicious pleuritic rub on examination of base of right lung. December 23, 1909: Condition has remained much the same, he still has evening fever up to 100°F. A differential leucocyte count showed a slight polymorphonuclear increase. December 26, 1909: More marked signs of pleuritic effusion at right base. Temperature now normal. December 28, 1909: Needle of hypodermic syringe introduced into base of right pleural cavity, several drachms of clear serous fluid
escaped. Fomentations applied. January 10, 1910: Patient still getting evening fever. The right pleural cavity was aspirated, and 30 oz. of slightly blood-stained serous fluid were withdrawn. Patient felt better after this, but had a good deal of coughing during the night and expectorated a considerable quantity of blood-stained, frothy, pus-like sputum. January 25, 1910: Condition of chest much improved, only slight rales now heard at right base, and a much better air entry into base of right lung. There is still much dark, pus-like sputum; it was examined for tubercle bacilli but none were found. The character of the expectoration suggested that it probably came from the liver. January 30, 1910: Condition practically unchanged, still coughing up large quantities of dark sputum. Temperature ranging between 97° and 101° F. February 12, 1910: The chest is dull in front up to right nipple, resonant behind; he occasionally perspires a good deal, and does not sleep well owing to his incessant cough.

Exploration.—February 14, 1910: I saw the patient for the first time to-day. He looked very ill, was very emaciated, his skin was of a sallow, earthy tint, he was constantly coughing and bringing up large quantities of frothy pus the colour of anchovy sauce, and typical of the pus from a tropical abscess of the liver. He had irregular intermittent pyrexia, his pulse was 104 per minute and very small. The liver dullness appeared to be slightly increased upwards in the right nipple line, normal posteriorly. Coarse rales and moist sounds were audible over the lower part of the right lung anteriorly. I decided to explore the liver for pus with an aspirating needle. Owing to the extremely serious condition of the patient a general anaesthetic was deemed inadvisable; eucaine was injected subcutaneously immediately below and anterior to the angle of the right scapula; a small incision was made through the skin and the aspirating needle passed through the wound into the liver; the liver was thoroughly explored, but no pus could be found. The patient passed a bad night and coughed up a large quantity of pus.

Second Exploration.—February 18, 1910: I was asked to see the patient again to-day, and on examination found a cone-shaped area of dullness extending upwards from the liver dullness anteriorly, to above the level of the right nipple. Under local anaesthesia as before, I passed an aspirating needle into the lung in this dull area, and immediately tapped an abscess and aspirated 18 oz. of pus the colour of anchovy sauce. The dullness over this area immediately disappeared, and there were signs of a large cavity in the lung. The patient passed a good night, had very little cough and practically no sputum, and on the morning of the 19th his temperature was normal.

Operation.—February 19, 1910: To-day, under chloroform anaesthesia, I excised 1\(\frac{1}{2}\) in. of the sixth rib immediately below the right nipple, opened the abscess cavity in the lung, and introduced a large rubber drainage tube—a considerable quantity of thick reddish pus escaped.
On the patient being put back to bed, the drainage tube was connected with a rubber tube leading to a vessel placed beneath the bed; this drainage acted well. Lieutenant Orr Wilson, R.A.M.C., under whose charge the patient then was, notes that the patient now made a rapid and continuous progress towards recovery. He was discharged from hospital on March 24, 1910, with the incision practically healed, no discharge, and he had gained nearly 2 st. in weight since the operation. From March 6, 1910, to March 14, 1910, a small quantity of bile was present on the dressings over the wound when they were removed daily.

I think this case is interesting:—

(1) From the somewhat unusual position in which the abscess was opened and drained. Although Rendu in his table, quoted by Manson, gives the lung as the commonest position in which an abscess of the liver ruptures spontaneously, still it is not usual to find the signs of the pulmonary abscess most marked in the front of the chest.

(2) The common experience that after spontaneous rupture of a hepatic abscess, pus is not found on exploration of the liver with an aspirating needle.

(3) The large size of the pulmonary abscess. When I first saw the patient he was coughing up nearly two pints of pus in the twenty-four hours.

(4) The pleural complication—a dry pleurisy at the base of the right lung is very common in conjunction with an abscess of the right lobe of the liver pointing upwards; a pleural effusion is not nearly so common, and is apt to mislead one, in that either the case is thought to be one of pleural effusion only, or that the hepatic abscess has ruptured into the plural cavity in a patient whose symptoms have pointed strongly towards hepatic suppuration.

(5) Owing to the pleurisy and the fact of the pulmonary abscess having existed for some time before it was opened, the parietal and visceral layers of the pleura were adherent in the situation where the abscess was opened, so that pneumothorax did not result.

(6) The rapid and complete convalescence of the patient after the pulmonary abscess was drained.

RETRO-PERITONEAL TUMOUR.

By Captain R. H. Bott.
Indian Medical Service.

SEROY S. S., 14th P.W.O. Sikhs, aged 30, thirteen years' service, was admitted to the Combined Indian Troops Hospital, Quetta, on May 25, 1910, suffering from epilepsy.

History of the Present Condition.—Patient stated that he had suffered from fits at intervals for about nine years; they never occurred when he was on military duty. On the day previous to admission he had a typical