Clinical and other Notes

of adeno-carcinoma. The tumour cells showed great anaplasia and mitosis was seen, indicating a very active malignancy and in our opinion the type was of the "liver-cell" rather than "bile duct" variety.

Primary carcinoma of the liver is at all times rare, but especially in one so young. It is divided into two varieties by most authorities—the bile-duct cell adeno-carcinoma and the liver cell adeno-carcinoma.

In the former case the carcinoma originates in the columnar or cubical lining cells of the intrahepatic bile-ducts. In these cases there is no cirrhosis and as a rule no bile staining of the tumours. Secondaries are nearly always present and it is the rarer of the two types.

The liver-cell type generally follows on cirrhosis of the liver but according to Muir may occur without this. Secondaries are rare and the tumours are bile stained. McCallum supports Muir in this description.

In this case the macroscopic features favoured the latter group and in the sections a definite resemblance to liver cells was noted in the tumours which were least degenerated. In the degenerated tumours anaplasia and the degeneration made it difficult to distinguish the cells of origin.

Whether the cells originated from liver cells without previous cirrhosis or from epithelium lining the bile-duct, the condition is rare and sufficient excuse for publishing the case.

A further point of interest on the clinical aspect is the question of pain. During the last few weeks of his life the patient suffered much pain—morphia ½ grain had to be given four times a day—and yet during his stay in hospital the size of his liver did not increase much. On admission both lobes of the liver reached almost to the umbilicus. One would have thought that the enlarging of a normal liver to this size would have been painful, and yet he had carried on with his duties with comparatively little discomfort for weeks if not months while his liver was doubling its size.

Our thanks are due to Private G. K. Smith, R.A.M.C., for taking the photograph of the organ after removal.

AN IMPROVISED APPARATUS FOR THE ADMINISTRATION OF ETHYL CHLORIDE AS A GENERAL ANÆSTHETIC.

By Captain A. MACDONALD,
Royal Army Medical Corps,
AND
2nd Class Assistant Surgeon R. DORLING,
Indian Medical Department.

This description of a simple, improvised apparatus for administering ethyl chloride for general anaesthesia is offered on account of the ease with which it can be put together out of readily obtainable materials and the success which has attended its use in some eighty cases observed.
The necessary apparatus consists of:

(A) A face-piece of Gamgee tissue, in which a slot has been cut to admit the patient's nose and mouth.

(B) A Schimmelbusch's chloroform mask, fitted with four thicknesses of surgical gauze.

(C) A cylindrical wire frame about fourteen inches in height, fashioned from ordinary packing-case wire, so that the lower perimeter accurately fits the main frame of the Schimmelbusch mask.

(D) A covering, sewn firmly round the wire frame consisting of one layer of surgical lint and an outer layer of jaconet, in such a way as to allow a cuff of jaconet (E) to be invaginated about four inches into the frame at its upper end.

Diagram of apparatus cut away to show wire frame and cuff.

An ampoule of ethyl chloride, fitted with a spring nozzle, completes the necessary apparatus.

When in use the mask is fitted firmly into the frame by tapes fore and aft, so that the mask and frame can be easily controlled by the forefinger and thumb of one hand, whilst the other hand holding the ethyl chloride spray is passed into the cylinder, extraneous air being excluded by the cuff of invaginated jaconet.
The speed of induction is under complete control and in practice it has been found that from five to ten cubic centimetres of ethyl chloride so administered will give from two to four minutes of complete anaesthesia.

Recovery of consciousness is complete in a few minutes and no untoward effects have so far been noted.

Although it is impossible to be certain that similar appliances are not in everyday use, none such has come to our notice, and the apparatus described above has been arrived at by experiment from materials available to all.

The authors are indebted to Lieutenant-Colonel A. G. Wells, D.S.O., R.A.M.C., Officer Commanding British Military Hospital (with Indian Wing), Mingaladon, Burma, for permission to forward these notes for publication.

**Echoes of the Past.**

**WAR EXPERIENCES OF A TERRITORIAL MEDICAL OFFICER.**

By **Major-General Sir Richard Luce, K.C.M.G., C.B., M.B., F.R.C.S.**

(Continued from p. 65)

**CHAPTER XVIII.**—*THE CAPTURE OF SHERIA AND GAZA.*

The scheme for the second phase of the operation was as follows:

The 53rd Division was temporarily attached to the Desert Mounted Corps whose commander became responsible for the protection of the right flank.

The 74th, 60th and 10th Divisions were to attack the Kauwukap trench system, placed in this order from right to left.

The 74th Division was to begin the operation by an attack on the extreme left flank of the enemy with one brigade making the direction of their attack parallel to the line of the trenches. The other two brigades were to be echeloned on the right flank to meet any counter attack from the north-west.

During the attack by the 74th Division on the trenches to the east of the railway the 60th and 10th Divisions were to move forward to cover suitable positions from which their artillery could make the preliminary bombardment of the Kauwukah system.

As soon as the 74th Division reached the railway, the 60th and 10th were to deliver their attack on the main position west of the railway.

Only one brigade of the 10th Division was to be employed in the attack the other two being held in corps reserve.

Once the Kauwukap system was taken it was intended that the 74th 9