two were unconscious. Case 30 is explainable because of a lacerated scalp and possible skull fracture. No information was obtained in Case 32.

Alcoholic stupor was observed in 15.6% with blood alcohol between 0.41 and 0.5%. Of these cases two were unconscious. Case 32 was unconscious but woke up after a bath.

The cases showing a blood alcohol from 0.5 to 0.6% amounted to 3.1%. The above result for non-intoxication 0.1 to 0.2% blood alcohol apparently is greater than the amount indicated by Heise,[6] who believes loss of efficiency and judgment occurs even when small amounts of alcohol, 0.02%, accumulate in the blood and urine, although the individual can still walk and talk. It is shown from the results given that in all the stages of intoxication a small percentage of the cases always show more signs of intoxication than the blood test actually reveals. This we believe to be due to accidents, complications, taking hypnotics or other sleep producing substances previous to the consumption of alcoholic drinks. Experiments have been conducted on dogs to partially prove the latter point and the results will be reported in another communication.

Summary. In general, intoxication is not noticeable in the human until the blood alcohol concentration is greater than 0.2%; from 0.31 to 0.4% there is marked intoxication; alcoholic stupor is definite between 0.41 and 0.5%; above 0.5% coma or death may result.

8172 C

Effect of Total Pneumonectomy on Position of the Esophagus.*

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The increasing number of instances in which the total removal of one lung in man is being performed for tumor or bronchiectasis has created renewed interest in the effects of this procedure. The experiments reported here deal with the effects of total pneumonectomy on the position of the esophagus of the dog, but it does not follow necessarily that similar alterations occur in the human.

[6] Heise, H. A., *J. A. M. A.*, 1934, **103**, 739.

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A complete removal of either the right or left lung was performed in 4 dogs. Anesthesia was produced by the administration of ether through a tracheal catheter which was connected to a positive pressure device. The operation was performed through an

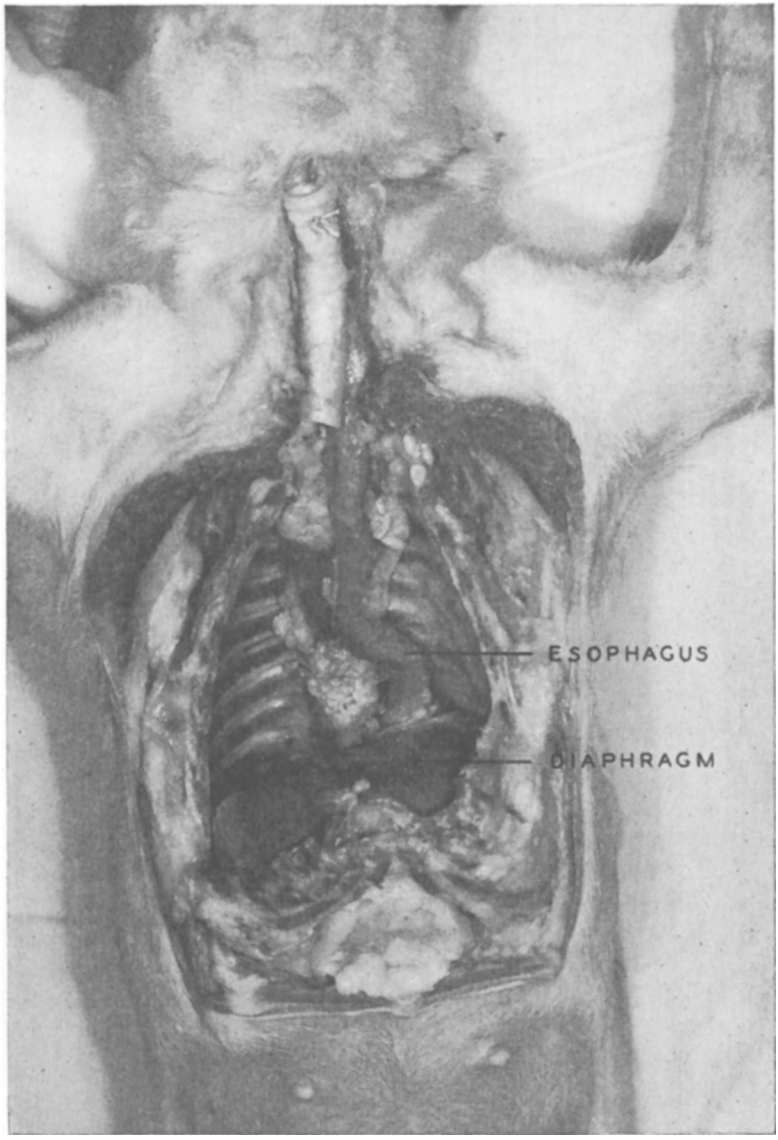

FIG. 1.
Showing the deviation of the esophagus to the left following the total removal of the left lung. Trachea in midline. Diaphragm not paralyzed.

intercostal incision and the chest was closed tightly following the removal of the lung. When the termination of the experiment was decided upon, the animal was bled to death, the remaining blood was washed out by injecting salt solution intravenously and this was followed by the introduction of 10% formalin. The chest cavity

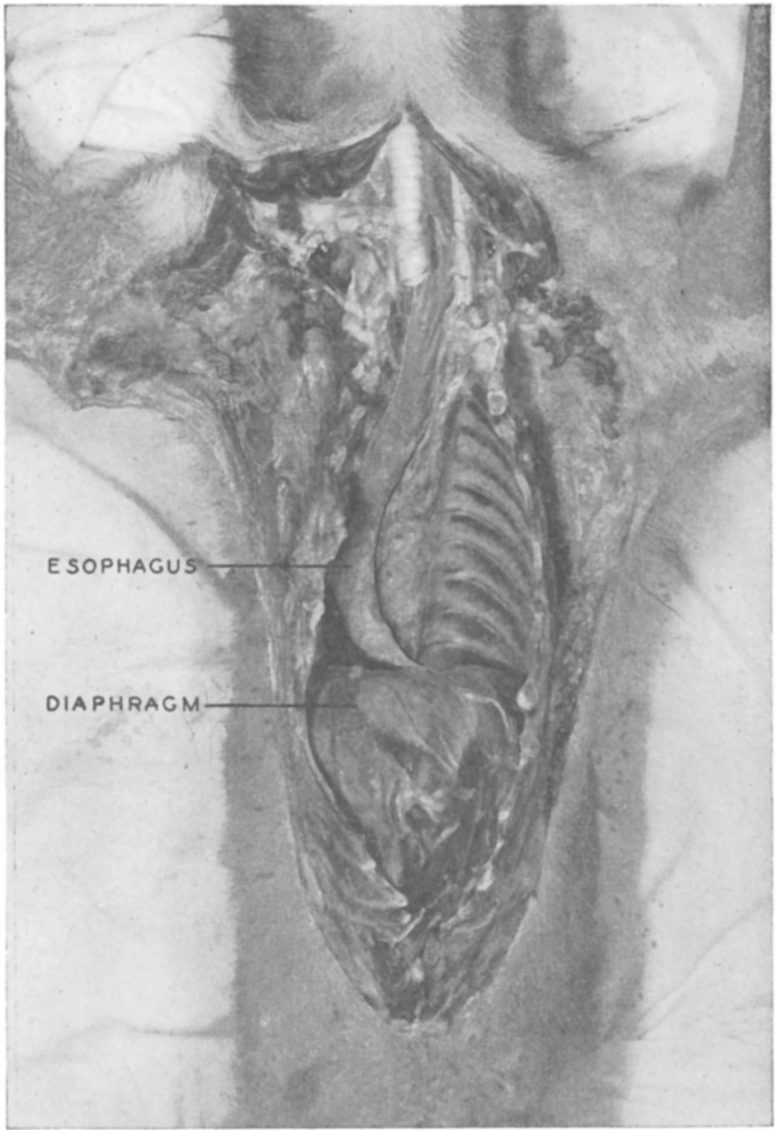

FIG. 2.
Showing the deviation of the esophagus to the right following the total removal of the right lung. Diaphragm not paralyzed.

was then opened and the position of the esophagus was determined.

The first animal was killed 10 months after the left lung had been removed. The left pleural cavity seemed to be somewhat smaller than the right and the left side of the diaphragm was slightly higher than the right. The filling of the chest appeared to be due in the main to an increase in size of the right lowermost lobe. The lower part of the esophagus occupied a position far to the left of the midline. This is shown in Fig. 1. There was no constriction of the esophagus and no ulceration was noted.

The second animal was killed 5 months following the total removal of the left lung. The findings were similar to those observed in the first experiment.

The third animal appeared to have distemper 5 weeks following the total removal of the right lung. Death was caused painlessly and the usual procedure carried out. The esophagus was found to be markedly deviated to the right. The position is shown in Fig. 2. The 2 sides of the diaphragm were at approximately the same levels.

In the fourth experiment, the left lung was removed and the left phrenic nerve was paralyzed. Fifteen weeks later it was observed that the left diaphragm was very much higher than the right and that the esophagus occupied essentially its normal position.

Summary. Total pneumonectomy in dogs, without an associated paralysis of the diaphragm, was found to be followed by a marked deviation of the esophagus to the side from which the lung had been removed.

8173 C

Reactivation of Ammonia-Inactivated Complement by Leucocytes.

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From the earliest work on the lytic action of serum, the cells of the tissues, particularly the phagocytes, have been considered a source of complement. However, convincing proof is still lacking that these cells either contain or liberate active complement. The possibility that they may contribute substances inactive alone but nevertheless essential to complete complement action has received little consideration.