pneumothorax extended as high as the third right interspace, and in which, *post mortem*, the diaphragm was found at the level of the third interspace.

CASE II. is of interest from the development of an air-containing abscess, in consequence of the perforation of the colon and communication with a perinephritic abscess on the right side. It had perforated the diaphragm and produced a pleurisy at the right base.

In Case III., on the other hand, there was, following injury to the kidney, an empyema which had perforated into the lung, and the sub-phrenic abscess received its air supply from this source, which is somewhat unusual.

The two cases of simple sub-phrenic abscess are of doubtful etiology, and are of interest chiefly from the remarkable simulation of empyema and the good results which followed operation.

Case I. is one of the few instances in which the diagnosis of pyopneumothorax sub-phrenicus was made during life, and in which recovery followed operation.

CASE. I. History of dysentery; symptoms of abscess of liver: development of a large area of tympanitic resonance in the right lower axillary region; diagnosis of pro-pneumothorax sub-phrenicus; operation; recovery. John S., aged thirty-six, was admitted to the Johns Hopkins Hospital on January 16th, 1890, complaining of fever, diarrhea, and pain in the abdomen. There was nothing of moment in his family history. He had typhoid fever when twelve years of age. He had gonorrhea, but not syphilis. He has been a very hard drinker for very many years. September, 1888, he had dysentery; not a very severe attack, as he was not laid up in bed; but the stools were frequent, and he passed blood and He has not been entirely free from intestinal trouble since, but he has been able to keep at work with but few interruptions. Latterly he has lost flesh, and within the past six weeks has become very weak and feverish. On several occasions the feet have swollen. He has had no chills; has never been jaundiced, and has never had severe pain in the region of the liver. He stopped work two weeks ago.

Condition on admission. Emaciated; weight 116 pounds; anemic, muscles flabby; skin hot, dry, and sallow; conjunctivæ white; tongue pale, indented, and with numerous aphthous sores on dorsum and sides. Pulse 96; respiration 30; temperature 101°. Lungs are normal, with the exception of a few dry crepitant râles, probably pleuritic, at the right base.

Cardiac dullness begins at the fourth rib. There is a soft systolic apex murmur. The second sound is reduplicated at base.

Liver. No prominence in hepatic region. No tenderness on pressure