

where it passes on insensibly into bowel tympany. There does appear, however, to be a slightly dull note before bowel tympany is reached. Anteriorly, the metallic tympany extends to within 4 cm. of nipple line. Behind, it extends to posterior axillary line. When turned on side, percussion in axillary line is distinctly flatter, and there is movable dullness. Altogether, tympanitic area occupies position of seventh to tenth interspace in a line drawn at the level of ensiform cartilage. A diagnosis of a sub-phrenic air-containing abscess was made, and the patient was transferred to the surgical department.

On the 29th Dr. Halsted resected about an inch and a half of the tenth rib in the mid-axillary line, and removed about a litre of a thick, grumous pus, which had an acid reaction, and very distinct odor of vomit. The patient rallied well from the operation.

February 2nd. The last few days the patient has had a slight elevation of temperature. His general condition, however, is good. The tympanitic note is even more intense than before the operation, and it is almost amphoric in character. It extends anteriorly as far as the nipple line, where it is only 10 cm. from the nipple line. The area is triangular in shape, the apex being toward the sternum. It is 15 cm. in transverse diameter. The liver seems pushed far over into the left hypochondrium.

10th. Since the last note the patient's condition has rapidly improved. The temperature has been but slightly above normal, the sweats have stopped, the diarrhea checked, and his appetite has become very good. The wound is dressed every day and the cavity irrigated. Dr. Halstead is now able to pass his finger far down into the flank, reaching quite to the level of the crest of the ilium. A flat tympany extends in the mid-axillary line from the lower margin of the eighth to the iliac crest.

14th. General condition remains excellent. The cavity has reduced very considerably and the discharge has lessened.

The improvement continued, and the patient was discharged well.

CASE II. *Tuberculous pyelo-nephritis; tuberculous colitis; perforation at splenic flexure of colon, with the formation of a perinephritic air-containing abscess; prominent tumor over tenth, eleventh, and twelfth ribs behind; incision and drainage; pulmonary tuberculosis; death; autopsy.* In October, 1887, I saw, with Dr. R. H. Harte, of Philadelphia, a case which illustrates a somewhat unusual form of this condition. He was a young man, aged about thirty, who, as early as 1880, had passed blood and clots with the urine, and was sent to California under the impression that he had Bright's disease. He lived a pretty hard life, and had been treated for stricture of the urethra and irritable bladder. When Dr. Harte saw him in July he had lost much flesh, was very pale, but was still fairly muscular. The urine contained pus and blood; the bladder was very irritable, and micturition was very frequent.