gested, while the walls were thinner than normal. The lymphatic glands were enlarged and the intestines were distended with gas. Right kidney was slightly contracted, capsule somewhat adherent, congested, and cortex normal; weight 4 oz. Left kidney contracted, capsule adherent, cyst at lower end and somewhat congested; cortex thinner than normal; weight $2\frac{1}{2}$ oz. The tail of the pancreas consisted of a thick fibrous mass, attached to the spleen, which was doubled on itself to a considerable degree. The mass was hard and dense. On section was firm to the knife and showed but little vascularity. The liver weighed 2 lb. 10 oz., with but little normal liver tissue. This was also thickly studded with fibrous nodules ranging in size from the diameter of the tip of the little finger to an inch or more. They seemed to be in close relationship with the vessels.

Sections of the above were sent to Dr. H. N. Kingsford of Hanover, N. H., for diagnosis. He reported as follows: "Post-mortem changes had set in before specimens were received. Spongy, smooth, hard nodules varying in size from a pea to that of a large marble were scattered throughout the substance of the liver. The surface of the liver is light brown, capsule torn. On a portion of the capsule appear numerous small black spots. Microscopical examination shows these nodules to be composed of epithelial cells, growing in all directions, with more or less fibrous tissue separating the masses of cells; very few liver cells are found. Very few mitotic figures are seen. The pancreas appears about normal. The stomach shows the edge of a chronic ulcer. There is no evidence of epithelial proliferation in the stomach wall. The spleen shows chronic passive congestion with obliterative endarteritis. Diagnosis is papillary adenocarcinoma of the liver, probably originating from the bile ducts. The patient had been constipated at times, due no doubt to this disturbing element in the liver. As far as the chronic ulcer of the stomach is concerned he had never complained of any disturbance in that organ. There were adhesions at base of right lung and the left was adhered to the chest wall so that it was impossible to break up the adhesions without tearing the lung apart. The heart showed thin muscle walls and both anti- and post-mortem clots in both right and left auricles and ventricles, with calcareous degeneration of aortic and mitral valves. The brain was not examined, as permission had only been obtained to make a satisfactory diagnosis of the cause of death."

It was interesting to observe that while the immediate cause of death was due to perforation and its accompanying results, there existed many other conditions that would ultimately have terminated the life of the patient.

DEATHS FROM LIVE WIRES.—It is reported that during the recent severe storm in Philadelphia, owing to carelessness in cutting off the electric current, five men and many horses were electrocuted by fallen wires.

Clinical Department.

EPIDEMIC PNEUMONIA AT WEST TOWNSEND, MASS.

BY R. S. ELY, M.D., WEST TOWNSEND, MASS.

WEST TOWNSEND is a Massachusetts village of about two hundred inhabitants, situated about ten miles from Groton, and the series of cases of pneumonia, with a very high mortality, which I briefly report may have an added interest on account of the cases of the same disease occurring about the same time at the Groton School, which have attracted wide attention, and on account of the proximity of Groton to West Townsend.

Between Dec. 1, 1901, and Feb. 1, 1902, there have been ten cases of pneumonia in adults in West Townsend, eight of which proved fatal. There were also four cases in children, all of which are either well now, or on the road to recovery. Of the ten cases in adults, eight occurred in my own practice, with six deaths and two recoveries. I judge the other two cases, which I did not see, were similar to mine, from the reports of their attending physicians.

In the above-mentioned cases the disease assumed two types, one a typhoid pneumonia, the other an influenzal, or double, pneumonia. Of the eight that died, four were distinctly typhoid in character. Almost from the onset there was a dry, brown tongue, stupor, low muttering delirium and great prostration.

In the second class, the disease commenced in some as a simple influenza, accompanied by headache, backache, fever and extreme restlessness, the pneumonic symptoms not appearing for a few days; in others there was consolidation in one lung within forty-eight hours, the inflammation remaining confined to this lung for from four to five days to a week, then the other lung became affected, the patient wearing out in from ten to fifteen days. Most of the cases were ushered in by slight chilliness, a temperature of from $100\frac{1}{2}^{\circ}$ to $102\frac{1}{2}^{\circ}$, and very obstinate vomiting. This latter feature was very marked in the cases classed as typhoid.

Four of these cases were seen in consultation by Dr. Hartwell of Ayer, one by Dr. Stimson of Fitchburg, and another by Dr. L. G. Chandler of Townsend.

CASE I. Arthur F., age 35, a hard-working man, of exemplary habits. Had felt poorly for several days. When first seen had a temperature of $102^{\circ}+$; was extremely restless; worried constantly about his inability to work. In from two to three days he was delirious nearly all the time, and kept picking at the bedclothes and tried often to get out of bed; tongue dry and brown; there was but slight consolidation, the upper part of the right lung in front and the lower posterior portion of left being affected. This patient died on the seventh day.

CASE II. Andrew F., age 22, a section hand on the Greenville branch, B. & M. R. R. Taken sick Jan. 23, after exposure to cold and wetting

his feet the day previously. I first saw him Jan. 24. Lower lobe right lung was consolidated; respiration 60, and more at time; face cyanotic; temperature $103\frac{1}{2}^{\circ}$; pulse 130. Next day respiration was slower (35 to 40); less fever and slower pulse. He raised characteristic sputa. This patient apparently was gaining, when one night he got out of bed, his attendant being away for a few minutes, but fell back heavily, drew up the bedclothes, and was dead. Duration of sickness, five and one-half days.

CASE III. Mrs. S., age 65, widow. Taken with slight chilliness; temperature $102\frac{1}{2}^{\circ}$; pulse 120. Dry, brown tongue, delirium, marked stupor, deepening as the disease advanced. There was solidification of the lower lobe of the right lung. There was almost no pain, but slight cough and little expectoration. Death on eleventh day.

CASE IV. James M., station agent Greenville Branch, B. & M. R. R., age 41, a man of excellent habits. Initial symptoms were decidedly grippy; headache, severe backache and moderately high fever. Pneumonia involvement of left lung found on the third day; cleared nicely a few days later. He was better for one day, then the pulse became accelerated, and the fever increased. The other lung was involved. This patient was sick in all fourteen days, the last three of which he was apparently gaining. The fever was diminishing, and there was improvement in pulse and respiration. He had better nights and expressed a desire for something to eat. On the fourteenth day towards night the patient became delirious, heart's action became rapidly worse and death ensued a few hours later.

CASE V. Robert K., Nova Scotian, age 45, a strictly temperate, hard-working cooper; this case was almost exactly like the preceding one, excepting that the right lung was first involved; the left lung was affected at the end of first week. He died after a sickness of fifteen days.

CASE VI. Mrs. B., widow, age 61. At onset slight chilliness, moderately high fever, excessive vomiting, the latter lasted from sixteen to twenty-four hours. Middle portion of right lung solid; almost no cough; no expectoration; dry, brown tongue; clear headed until a few days before death. No pain in this case, simply a feeling of weariness. Death on the thirteenth day.

In the treatment of these cases the remedies used were calomel purges, quinin, quite freely at the start, and as the disease advanced, strychnia in doses of $\frac{1}{32}$ gr. every three or four hours, in some cases subcutaneously; towards the last whiskey and milk regularly, also a free use of oxygen gas in some of the cases.

The two patients who recovered were both women of about sixty years of age. There was consolidation in the lower lobe of the right lung. In one there was a temperature of 105° within a day or two, stupor and involuntary evacuation of bowels and bladder; gradual improvement; and out of danger in ten days. The other had profuse vomiting, but gradually improved after the third day. Convalescence in about ten days.

There were four well-marked cases of pneumonia in children: One case occurred in a house where a patient died of the same disease (Case II of my report); the second patient, a sixteen months' baby, was taken sick Feb. 1, the former dying Jan. 25. The woman described in Case VI lived within a short distance of this house and called there while Case II was sick, about Jan. 22 or 23. She was taken sick Jan. 29. This house was quite close to the railway station, where the patient described in Case IV was employed; his work, in looking after freight cars and in helping to load them, frequently called him within a few rods of the house. In one other instance there were two sick in the same house, that is, the station agent (Case IV) and his mother-in-law (Case III), the latter coming down a little in advance of the agent.

As far as grouping of cases is concerned, there were five sick at one time, namely, Cases III, IV, V, VI, and a six-year-old girl, whose case is not included in my report. There were also three children sick at the same time, two on opposite sides of the same street, but about one-fourth mile from the station; the third case was on the same street as the station, but at least one-fourth mile from it. The fourteen cases in this village were all within one-half mile of each other, or nearly so.

We have recently had several cases of la grippe but no more pneumonia complications. They were freely purged and cinchonized at the start. In from three to seven days all were convalescent, no complications having arisen.

Medical Progress.

REPORT ON OBSTETRICS.

BY FRANK A. HIGGINS, M.D., BOSTON.

PUERPERAL ECLAMPSIA.

THE *Lancet*,¹ in an editorial on "Puerperal Eclampsia," says that among the most important of the problems in obstetric medicine that awaits solution is the causation of eclampsia and the best method of dealing with this disease when it occurs. These questions have been fully discussed by the Germans at Giessen and at the London Obstetrical Society without doing much to elucidate our knowledge of the condition.

The theory that eclampsia is due to a toxic state of the mother's blood is the one that holds the field at the present day, although we are ignorant of the nature of the toxin and of the manner in which it produces its effects. The French School teaches that the liver is the organ primarily at fault, and that the essential condition is one of hepatotoxemia, while the German teaching is that affection of the kidneys in the primary condition, and that the pathological changes in other

¹ Vol. II, p. 1206, 1901.