since the 24th. Complains of great tenderness of right side, which, on examination, presents the red blush and induration of erysipelas over the entire antero-lateral region. (The patient in the next bed is recovering from erysipelas of the head.) Applied nitrate of silver to limit the cutaneous inflammation, and ordered a poultice to the part.

29th.—About 9 A. M., the house-surgeon learned from himself that he felt much better and had had a good night, but he had not left the ward beyond two or three minutes when Churchill died suddenly and without a struggle.

Let me now, gentlemen, explain the manner of, and stages in, the diagnosis. The first question that arose in my mind, on first examining this case, was, *are the valves diseased, and which?* Finding no murmur with the 1st sound either over the semilunar valves or up the aorta, and no visible pulsation of the arteries, and remembering, that, contrary to the opinion of Louis, Bouillaud and others, it is only in extreme aortic obstruction that the pulse is irregular and intermittent, I decided that the *aortic valves* were sound. But the unequal, small, intermitting pulse was just what would exist in disease of the mitral. Now there was no murmur with the 1*st* sound at the apex of the heart, and extending thence towards the angle of the left scapula, as there ought to have been, had there been sufficient regurgitation through that valve to account for the condition of the pulse; hence I concluded that there was *no regurgitation* through the *mitral* orifice. But bearing in mind that obstructive disease of that orifice is capable of producing the same pulse, and by retarding the circulation through the lungs, of leading to engorgement of the right heart, retardation of the general circulation and general dropsy, and that mitral obstruction is only very rarely declared by a murmur with the 2*nd* sound, (most audible at the apex) because the left auricle does not propel the blood with sufficient force to cause a bruit, I concluded there might be *possibly obstructive* disease of the *mitral valve.* This is a point worthy of your attention; I repeat, the mitral orifice may be contracted—obstructed—without an abnormal bruit announcing it; indeed the presence of a bruit, under such circumstances, is the exception, its absence the rule.

But, again, other possible conditions of the heart, besides obstruction at the mitral orifice, were capable of accounting for the symptoms present in this case, thus: effusion into the pericardium; softening of the heart, whether from fatty degeneration, inflammation, blood disease or other cause; weakness of heart, from engorgement of its cavities and polypus, all produce many of the signs and symptoms observed in Churchill's case. However, the amount of dulness over the cardiac region scarcely indicated a sufficiently large effusion to so embarrass the heart, as to pro-