

the lung; the lung first becomes loaded with blood and bloody serum. If in this stage of the disease there is still crepitation, the lung has not entirely lost its natural characteristics, for it will swim in water. In the third stage the lung is much changed; there is an exudation which does not liquify; the cells are destroyed to a great extent; the lung becomes somewhat solid; the *post mortem* reveals a hepatized condition; the lung will now sink in water. It is sometimes called red hepatization, in contra-distinction to gray hepatization, or diffuse suppuration. The fourth stage is gray hepatization or diffuse suppuration, and presents a gray appearance; is soft and pulpy, except in the ox.

*Causes* are predisposing and exciting; constitutional; and plethora; improper ventilation; sudden changes in temperature (the weather in the fall of the year is more likely to produce it than the cold of winter); placing the horse in a warm stable, and then turning him out to pasture; clipping, and then exposing to the cold. It is also the result of neglected catarrh; being driven while suffering from catarrh, etc. Diseases of the air passages are likely to terminate in pneumonia; allowing the horse to stand in a shed where there is a draft. It will occur in well but improperly ventilated stables, such as standing the horse between two large doors; it is produced by inhalation of smoke, but this is not so likely to produce pneumonia as bronchitis; the improper administration of medicine producing bronchitis, and then pneumonia. It is more likely to occur in young horses than in old ones.

*Symptoms.*—The careful practitioner is but little troubled in detecting this disease. It is usually brought on by shivering; when the shivering ceases heat takes place; ears and legs cold, and then hot or natural temperature (the same in pleurisy); mouth hot and sticky; the breathing slightly affected; the pulse is what is called an oppressed pulse; it is quick—maybe full. The horse as a general thing persists in standing, for the reason that it gives him more ease than any other position, but there are exceptions to this rule. The eyes have a glassy appearance; the conjunctiva is injected; there is a peculiar flapping of the nostrils; a heavy, sighing, breathing; and one symptom that occasionally misleads is constipation of the bowels; the feces are covered with mucus or slime; by placing the ear to the chest, crepitation can be heard. It is a good symptom to see the animal look around him freely. The horse desires pure air, which you can determine by letting him loose, and he will go to the open door. The respiratory movements vary to a certain extent, but not so much as might be supposed; the horse breathes about ten times per minute, but it may vary to some extent. In pneumonia these movements are increased more or less, but pneumonia is a disease that often goes on to a considerable extent without showing any violent symptoms. Auscultation can either be detected by placing the ear to the chest or by means of a stethoscope. There are certain sounds; if the animal be excited, you will hear a peculiar sound [abnormal sounds are quite difficult to describe]. Use percussion; tapping the chest, there will be a resonant sound, but if hepatization is present there will be a dull sound. Place the ear to the chest and you will hear a crepitating or rumbling sound. If arterial injection has taken place, then you may have crepitation very well marked. The first sound is something like rubbing the hair between the thumb and finger near the ear; by-and-by when exudation takes place there will be no sound at all over