

split peas. This condition most marked at apices, in which are seen small old cavities. Spleen three times normal size, presenting numerous miliary tubercles in its substance. Kidneys average size; through cortices are several small scattered tubercles. Under the microscope, in spots, a good deal of proliferation of epithelium is seen in the tubes and around the Malpighian capsules. Liver normal. Brain not examined. Careful examination showed no sign of disease in right side of abdomen.

*Lead Poisoning.*—Dr. Girdwood read the reports of two cases occurring in the practice of Dr. Groves, Carp, Ont. The first was that of a widow, aged 34, who sent for the doctor November 30th, 1880. She was suffering from pain in abdomen; no tenderness on pressure. Appetite bad, much thirst, fœtor of breath, tongue coated, constipation. Treated her for colic. Was seen again in three days. Pain worse. Now found blue line on gums. Diagnosed lead poisoning. After much trouble, the source was traced to the well, or rather the pump. Six months before, a large piece of lead had been placed on the valve to weight it down, and the water, being very pure, acted upon the lead and made a solution. Other members of the family had been slightly affected by it. All recovered completely after the cause was removed. The second case was a Mrs. C., aged 37, who sent for Dr. Groves Oct. 19th, 1882. She complained of abdominal pains, also pains in the back and limb; had been so affected for two weeks before sending for the doctor. Her tongue was heavily coated with a dark fur; blue line on gums; inside of cheeks bluish-black; countenance anxious; face pale, subicteroid. Abdomen slightly tympanitic; no pain on pressure. Pain in abdomen was paroxysmal and lancinating in character, and seemed to shoot into the back and down lower limbs. Complained of metallic taste, fœtor of breath, and annoying eructations. No appetite; bowels constipated. Urine scanty and dark-colored. Extensors of forearms paralyzed. Wrist-drop more marked on right side. Was much emaciated; raising head off pillow caused nausea. Pulse 120; temperature 102°. Treatment: Gave first a brisk purgative, and left mixture of Potass. Iodid. v grs. three times a day and Chlor. Anodyne to relieve pain. After examining the well, cooking utensils, etc., at last came across a jar of vinegar, which was examined, and found to contain a large percentage of lead

acetate. On breaking the jar, a rounded elevation was seen on the inside of its bottom. This prominence was eaten into by the vinegar. The jar and vinegar had been purchased on October 4, '82. After questioning, he found his patient had partaken largely of this vinegar. In connection with these cases, Dr. Girdwood said: Dr. Groves sent me, in December last, a sample of vinegar which he wished me to analyse for lead, stating that he had a case of lead poisoning. I examined the sample of vinegar, and found it to contain 2.01 per cent. of acetate of lead. He also sent me a piece of broken pottery, which he informed me was a portion of the bottom of the stone jar which had contained the vinegar. I found this jar had been glazed with litharge, or oxide of lead, and that it had been acted upon by the acetic acid and the whole surface eroded. In these two cases of lead poisoning there is considerable interest in the sources whence the lead was taken into the system, and these point to the necessity of being constantly alive and searching all possible and impossible causes or avenues by which poison may be introduced into the system. In the first case, the danger of storage of water, more especially water which is pure, in leaden cisterns or carried through leaden pipes is brought prominently out. Had the water contained any sulphate, an insoluble sulphate of lead would have been found, which would have been inert. In the second case, the necessity of greater care in guarding food of all kinds from contamination is shown. Had this sample of vinegar been adulterated, as it frequently is, by 3 per cent. of sulphuric acid, this case of poisoning would not have come to light, because the sulphuric acid would have formed an insoluble sulphate, which would have stayed further action. But from not having any sulphuric acid in it, the acetic acid gradually acted on the oxide of lead and dissolved it. Another point of interest is the fact of increased temperature and increase of pulse, symptoms which I fail to find recorded in authors who speak of the symptoms of poisoning by lead. They also exhibit the cumulative effect of the poison, the gradual introduction of the poison, at last producing the set of symptoms which lead to the diagnosis of lead as the poison. And the poison acting on the liver, preventing the secretion of bile, and all the train of symptoms indicating hypochondria, depression of spirits, fear of impending danger, being well marked, especially in the latter case. And the gradual diminution of the