144—very weak and streaky. He still complained of very severe pain all over the abdomen. On inspection, the abdomen moved with respiration, but was rigid and very tender. Abdominal reflex was present. There was no loss of liver dullness, and no tumour could be felt. His condition rapidly became worse, and it was decided to perform an exploratory operation. Laparotomy was performed through the right rectus border (inner) incision. On opening the abdominal cavity it was found to be full of fresh blood. On passing the hand into the abdominal cavity the spleen was felt to be very soft and friable, though not a very large spleen. The patient's pulse completely failed on the table. The wound was quickly closed and no further surgical interference attempted. The patient was put back to bed and hot-water bottles applied, etc., but he died in about one and a half hours.

June 8.—On post-mortem examination the abdomen was found full of blood and enormous clots. The spleen was completely pulped, and weighed nine ounces. There was no appearance of external trauma. The rest of the organs appeared normal.

A SMALL OUTBREAK OF PNEUMONIC PLAGUE.

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Primary pneumonic plague is a relatively rare disease, and being one of the most infectious and fatal diseases is of personal interest to every medical man liable to meet it. On his prompt recognition of the condition his own safety and that of the other attendants on the sick depend.

A recent letter [1] on this subject pointing out the danger to doctors and nurses has prompted this note.

Pneumonic plague may be primary or secondary to other forms of plague, but is obviously more dangerous to the attendants.

An outbreak of primary pneumonic plague occurred among the Indian servants of the Soldiers' Home, Upper Topa, Muree Hills, India, some years ago and the history of the outbreak may be of interest and help to others.

On the evening of September 22 (19?) a sick man arrived at the servants' quarters of the Home from Rawalpindi; he was a hill-man like most of the servants of the Home and he was brought into the servants' quarters where eight servants sat with him all night. On the following morning, early, he was carried off on his charpoy and his further history is unknown. There was plague at that time in Rawalpindi and in view of later events it is probable that this man had secondary pneumonic plague; had it been primary he would scarcely have survived the journey. On the evening of the 24th, the eight servants who had sat with this man were complaining of "fever." I was called to see these patients on the morning of the 25th; the history one got before seeing them was, simply, that the previous
evening these men had gone off duty complaining of "fever"; nothing was said about the sick visitor of forty-eight hours before.

As soon as one entered the first patient's "go-down," the likelihood of an infectious pneumonia presented itself and one departed hurriedly to don mask, gown and gloves before making a further examination. The reasons for this were, firstly, the sputum, which was unlike any sputum one had ever seen before, resembling pure serum streaked with blood and slightly frothy, was being deposited all over the floor of the room; secondly, the look of horror on the patient's face, not a look of anxiety, but sheer dread. Properly garbed, examination showed all eight to be in much the same condition, the sputum varied in quantity, but it showed the same characters and in one case was extremely copious.

The look of horror was present in all in different degrees; the first patient seen showed it most strikingly, or possibly one became more accustomed to it.

The physical signs in the chest were in all cases well marked, coarse bubbling râles being a feature. No buboes were present in any of the cases.

The progress of the disease was dramatic, there was intense dyspnœa and prostration, and by September 27 all eight cases were dead.

The diagnosis had been confirmed by finding the sputum full of Bacillus pestis.

Common-sense precautionary measures sufficed to protect all the attendants on the sick and the surrounding population, but they were carried out rigorously as soon as the patients were seen, e.g., sentries were posted at all entrances to the grounds of the Home and a system of supply was organized for the occupants of the Home.

The isolation of the patients was simplified by the fact that the servants' quarters were well separated from other buildings.

It was remarkable with what celerity these and other measures recommended were carried out when the full significance of the outbreak was put before the O.C. Station. No further cases occurred.

The outbreak is of interest because it was so definite. The infection could only have come from the sick man passing through . . . there were no other plague cases nearer than Rawalpindi, forty miles by road. The incubation period was less than forty-eight hours, and strict isolation and careful protection of the attendants controlled the disease at once. The points on which the diagnosis was based (prior to bacteriological examination) were:

1. Eight persons closely associated with each other going down with pneumonia at the same time.
2. The character of the sputum less than twenty-four hours after the onset.
3. The look of horror.

REFERENCE.