## SANITATION IN THE MIDDLE AGES.

A vivid picture of sanitary hygiene as the monks of the Middle Ages knew it, was presented to us by Mr. Percy Flemming in his Chadwick lantern lecture, "The Percy Flemming in his Chadwick lantern lecture, Sanitary Arrangements of the Mediæval Monastery," given in the lecture hall of the Royal Society of Tropical Medicine and Hygiene at 26, Portland Place a few weeks ago. Mr. Flemming showed that these reverend men had a proper sense of the health precautions due in community living, where perhaps a hundred religious and a hundred lay brothers were herded together. means at their disposal, they did their best.

First, he reconstructed for us the water-supply system. Water from the mountain springs was collected in conduithouses; it passed thence by a perforated plate into the open and was taken through various settling tanks on its way to the monastery. These tanks had rude plugs which could be withdrawn and the tanks periodically cleansed. It was realised that by every means the water

must be delivered clean.

What was the conduit-house of the day? As an illustration, Mr. Flemming referred us to the little old brick building seen inside the railings of Hyde Park almost opposite St. George's Hospital. On a memorial in Hyde Park the statement is inscribed that Edward the Confessor gave a conduit to the Abbey of Westminster. Everybody knows the histories of the Park's springs, and reference is made to their medicinal properties in an issue of the Lancet in the eighteen forties.

We wandered, fascinated, with Mr. Flemming, all over the country, enjoying the views of old religious houses as much for their beauty as for their bearing on the lecture.

Examples of the early method of central water distribution were shown at Durham and Canterbury; in the latter, the water was introduced, in lead pipes collared together, into the lavatory of the Cathedral, an octagonal twostoried building which still exists. The pipes were taken up a central pillar in a large chamber (now empty) and discharged by four or five spigots into a double tier of stone basins, the lower taking the overflow. Here would come the brethren on their way from dormitory or refectory—the washplaces were always arranged equally convenient to both—to wash sleepy faces or sticky fingers, for forks were not yet.

Later, the central system gave place to long, shallow troughs with ledges above to support the lead supply pipes; one such may be seen in the cloister of Gloucester

Cathedral.

The singing school in Westminster Abbey was formerly the refectory and near it was discovered in recent years a blocked-up doorway which led to a towel chamber: half way up some steps in the thickness of the wall was a stone shelf with two holes for pipes. What was peculiarly interesting about this find was that it showed evidences of the use of filtering material; in the old cistern were fragments of old iron, earthenware and layers of gravel.

It requires a tense effort of imagination to see Hyde Park, Bloomsbury, Canonbury, as rural districts with fields and orchards through which ran the streams that were to supply Westminster Abbey, Greyfriars and St. Bartholomew's respectively. The monks' first care was to provide their infirmaries with water, and we understood that after the "Bart's" of its day had had its share, Newgate Jail came in for what was left.

Baths were used by the well-to-do in the middle ages, but it was a luxury not to be too heavily indulged in by those in the odour of sanctity. Some monasteries allowed one a month. The Benedictines allowed two a year, and enjoined that these were "not for the young, only the old and feeble." The seasons chosen were Christmas and Easter, and what happened in the hot days of summer history does not relate. The up-to-date London monks at Westminster tried to increase their allowance, but were over-ruled. Were there not authorities to quote, such as St. Augustine, who held that the body was vile in any case, and St. Etheldreda, who remained "pure of heart" though she washed but twice a year?

However, the monks were no strangers to water. By the Benedictine rule, they washed the linen in turn, and also each others' heads; then there was the ceremonial feet washing twice a week. Monasteries possessed both baths and bathhouses; one gate at Ely was called "The Gate to the Bath." There was an organised medical service at the monasteries and medicinal baths were quite a feature of the therapeutics of the time. It was laid down in the rules for brothers that "the bath be taken without grumbling at the order of the physician.

Drainage was Mr. Flemming's second subject. Much attention was paid to it in the lay-out of the monastery, and methods of flushing were as thorough as the then facilities could make them. A lantern slide showed us a main drain of brick and a fourteenth century inspection chamber, complete with heavy iron flushing handle. In some cases use was made, for flushing, of the local millrace; the name of that at Westminster still survives in Millbank.

The course of the great drain at Westminster Abbey was from Dean's Yard to Ashburnham House, thence under the vestibule of the School, past the Jewel House, under Abingdon Street, and so to the Thames; Mr. Flemming thought it was probably flushed by tapping the tidal stream.

The Domus Necessarium was a complete sanitary block, opening from the dortoir, and was always placed immediately over the drain. With the dissolution of the monasteries the sanitary blocks disappeared, and to give us a complete idea of one, Mr. Flemming made a reconstructed plan from those at Worcester and Fountains Abbey. In the Domus the privies were placed back to back with a sheer drop to the stream below by rectangular interstices in the drain roof, level with the dortoir floor.

Westminster School hall is the former dortoir and to this the domus necessarium ran at right angles. A window in the cloister looks into the fosse of the dortoir. At the end of last century a house in Dean's Yard was pulled down, and the original window of the "necessarium" was thereby revealed.

The Carthusian system was entirely different and brothers lived solitary in a series of cells (containing diningroom, bedroom and oratory), arranged round the cloister; a door at the back led by a covered way to the little privy in the garden, placed over running water. Each brother had, moreover, his own water supply.

"These people" said Mr. Flemming, at the close of a most absorbing lecture, "had a high standard, undoubtedly, regarding sanitation."

EILEEN ARNOLD.

## THE ROYAL RED CROSS.

At the Investiture held by the King on February 27th, His Majesty conferred the decoration of the Royal Red Cross as follows:-

Member: Miss Ethel Hirst, Queen Alexandra's Royal Naval Nursing Service.

Miss A. Lloyd-Still, President of the International Council of Nurses, has an interesting article on the Florence Nightingale International Foundation in this month's Monthy Bulletin of the League of Red Cross Societies.

previous page next page