The former is largely a question of general sanitation, and is in the hands of the Health Departments of our public bodies. As regards the latter, we can do a great deal in our own homes. We can protect ourselves to a great extent by unremitting care in the storage of our food, in the disposal of scraps, refuse, etc. No food should ever be left uncovered. We can also safeguard ourselves by the care we exercise as to the source of purchase of our foodstuffs, especially sweets. Those places where the shopkeeper has not taken any steps to protect the foodstuffs and sweets exposed for sale should be boycotted.

BEFTER HOUSES

BY

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'New lamps for old' cried Aladdin long ago in China, and some modern Alla-ud-Din might echo that call in rural India, bartering new houses, commodious, airy, and lasting, for the price of the insanitary hovels, which collapse in the rains.

From a little distance, a cluster of huts, with mud walls, and tiled roofs, nestling in the shade of a green mango-tope, is picturesque enough, but a nearer view reveals the dirt and squalor, of the quaint irregular houses, which line the village street.

Let us examine one or two of them closely. They are built mostly of mud and wattle, or of sun-dried bricks. In the first case, a flimsy framework of interlaced twigs and branches, is woven round uprights of bamboo. These walls of basket-work are then plastered inside, and out, with liquid mud, bamboo rafters are added, and the roof is tiled. A high ridge pole is used, to give interior space, for the ascending smoke. All cooking is done indoors, and there are no windows. Windows would be appreciated, but being unglazed, they give access to thieves.

The tiles are made locally, from the clay soil by the river, and are shaped by hand. They are irregular, and do not fit well, leaving gaps in the roof, for sun or rain. Moreover they are easily dislodged, and blown away in windy weather. Monkeys often tear them off, as a pass-time, and throw them at the passers-by.

The house is built too near the road, and encroaches on it. There is no plinth, and the main room is below street level. An unsavoury gutter runs in front, and the floor is awash in times of flood.

It may be, that a little milk is kept indoors, for an ailing baby. What is to hinder a snake coming in for the milk, and biting the baby in passing? Every villager has one or two head of cattle, a cow perhaps, and a goat or so. They are often diseased, and are certainly verminous. They share the house at night-time with their owners.

Next door, the dwelling is built of sun-dried bricks made of the same material as the tiles. This clay is also the basis of a thriving industry in rough pottery, and would make excellent tiles, were they dried longer, in symmetrical wooden moulds. But bricks need the fierce heat of a
kiln, otherwise they are friable, and porous, and as they absorb moisture, they are unsuitable for building material.

They are relatively expensive, and walls are built one brick in thickness, which is not enough, to resist the heat.

Both types of houses, are liable to collapse in the rains.

Then will come Alla-ud-Din (who may be the local Welfare Committee,) crying 'New huts for old'.

It is all a question of method, a little more land, where land is cheap, a little more time, and labour, spent on construction.

First of all, mark out the area, well back from the road. A twelve inch plinth of well beaten earth, is allowed to dry thoroughly, before the walls are begun. If scrap iron such as old railway lines can be got for uprights, so much the better, but usually bamboo are available, and a little tar, to paint them with, costs only a few pice.

The walls are of earth, mixed with clay, reinforced with small stones, and well worked till it is plastic. A little lime helps to keep out white ants. This prepared mud, is then placed in wooden moulds, raised round the edges of the plinth. The moulds are made of planks of wood, a double row, with a nine inch space between. Into these moulds the earth is rammed tightly, and left for a day or two to set. Then the planks are taken away, and the wall, only a yard as yet in height, is allowed to dry in the sun. It must be hard and firm, and perfectly dry before the next section is added above it. The moulds are used as before, and the plastic earth pressed tightly. This section is allowed to dry, and the wall is now six feet in height. The last section must leave spaces for clerestory windows, which are added last of all.

Finally there are strong even walls, nine inches deep, capable of bearing a well tiled roof. The rafters are of bamboo, and the tiles are made in wooden moulds, all the same shape and size, so that they fit well, and can be made secure. The roof is given a wide spread, so as to form a verandah in front. Here, a space can be made for cooking, and some of the family, can sleep outside at night.

The strong walls of beaten earth are used to form a courtyard. Here the cattle can be stabled, and here also, can be made an outside sink for washing the cooking pots. A little more labour will provide a family bathing place, and both should be cemented. But if every anna has to be considered, the sink and bathing place can be made of flat stones over a foundation of loose small stones. These will drain away the water, and prevent mosquito-breeding pools.

These houses are not perfect, but they cost no more than the hovels they replace and they have the following improvements:—

1. A 12" plinth, to keep out snakes and floods.
2. Clerestory windows (i.e. windows under the roof) which are thief-proof, and provide for ventilation.
3. Verandah-space for sleeping porch, and kitchen.
4. Outside sink, and bathing place.
5. Courtyard for stabling cattle.

[Mrs. Tarr has kindly offered to send plans to anyone who cares to write to her for them.—15a.]