dry, turns up in hard clods, is also suitable. Material

The prospectus declares that "the labour of Guildsmen will no longer be regarded as a commodity—to be purchased or not as required. As soon as it can be arranged, the Guildsman will be 'on the strength' for life. He will draw Guild pay in sickness or accident, in bad weather or in good, at work or in reserve."

The Guild will undertake work for every type of building owner, whether public or private. It will build for agreed prices or for prime cost plus a fee. But in every contract the price or the fee will include the percentage necessary to provide for continuous Guild pay, for overhead charges—for purchase of plant and, if necessary, for the hire of capital at fixed rates without powers of control.

"Organised public service" is the watchword of

Organised public service" is the watchword of the Guild. It means that under no circumstances will its surplus earnings be distributed as dividends. All surplus goes to the improvement of the service—in the form of increased equipment, reserves, technical training and research, elimination of hired capital, and when possible, the reduction of prices.

The ownership of all plant and material is to be transferred to the properly constituted authority to be set up in connection with the coming National Guild of Builders—a great industrial combine for the public service.

The Guild gives a new form of guarantee for the performance of its contracts—a guarantee based on capacity to produce and backed up by a roll of volunteers pledged to do the work.

The London Guild Committee is already in negotiation with half-a-dozen of the local authorities in the London area—including the County Council itself. All its trade union members have been elected and some of the approved groups are also represented. Volunteers from every grade, whether technical or operative, are enrolling daily. It is expected that the signature of its first contract may come at any moment, and this momentous experiment will then be really launched.

## Houses of Earth.

The following letter appeared in The New Zealand Herald last month:—

Sir,—Allow me to make known the method of building pise houses. Now that the price of building materials has reached such an alarming level, I think pise houses should, in country districts or even in the town, prove quite satisfactory. What is pise construction? It is the direct utilisation of suitable local material for house construction in such a form that manufacture as ordinarily understood is simplified, and unnecessary transport eliminated. There remain examples to-day of efficient cottage and farm buildings erected on this system. To prevent decay to this system of building, all that is necessary is proper foundations and roofs, which to-day can easily be provided.  $\Lambda$ suitable material would be almost any earth containing a fair amount of loam. Soil which cakes after a heavy rain, or which, ploughed or dug when

of a candy or clayey nature should be avoided. All roots and vegetation should be removed. The earth is best used as it is dug, and, if it is too dry, should be brought to the correct moist condition by watering it about two days before it is to be used. It should be just moist enough to be crumbly and yet adhesive enough to retain the impression of the fingers when pressed in the hands. If too moist, it will stick to the rammer and work up squashy; if, however, it is too dry it will work up loose. The earth should be spread in 4in. or 5in. layers between movable timber casings, and each layer should be well rammed with heavy wood or iron rammers. The top of any layer which has become dry should be slightly moistened before the next layer is commenced. A suitable thickness for the walls is 18 inches. The wood casings might be in 10ft, by 2ft. 6in. sections, formed of 11in. wood. Iron clips or small bolts could be provided for attaching one section to another, also distance pieces, and bolts running through the wall to prevent the casings spreading. The casings are raised as the work proceeds. It is very necessary that the walls should be protected from rain whilst they are being built. The following points also require attention:—(I) Some form of damp course must be provided. (2) The wall should be finished with two or three coats of whitewash or, even better, tar. The walls could be rough cast—the rough cast being well pushed into the hard pise walls with a flat board. (3) External angles might be protected by suitable wood fillets. (4) Door and window frames should be built in as the work proceeds. They could be secured to the walls by means of strong iron holdfasts about 15 or 18 inches long, having one end nailed to the frame and the other turned up and built in. Four holdfasts to each frame should suffice. (5) The roofs should have eaves projecting about 2ft. 6in., so as to help to protect the walls from rain. They should have wide wall plates secured to the wall with bolts or ties, wood rafters and collar ties. The inside walls can be plastered and papered if desired. Pessimists say that pise walls will soon be disintegrated. First they say the winter storms will beat against it and when it has become saturated with wet, a sharp frost will come and there will be something like an explosion at the surface, which will cause great pieces of the earth to break off. To guard against this use three coats of some patent damp-proof mixture which will waterproof the walls. The rooms of pise houses are warm in winter and cool in summer. No frost can penetrate through 18 inches of rammed earth. It is a mistake to allow stones to be mixed with the earth, as it tends to make the walls rather pitted in places. They do not weaken the wall materially, but it requires a rather extravagant use of tar. Any new method or old method revived has to face natural doubts as to amount of maintenance which will be involved by its adoption and people will be chary of adopting the pise form of construction until they are satisfied that it will stand as well as the old cob-which is another name for pise—of the Devonshire villages.