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Perfect Food With No Soil

By 'Daily Sketch' Agricultural Correspondent

M AGNIFICENT carnations and supergrade lettuces are being grown without soil by Mr. S. R. Mullard, the radio valve pioneer, at his nurseries at Englefield Green,

He showed me some of the choicest lettuces I have ever seen or tasted, growing in coarse shingle in a concrete tank, fed only by a nutrient chemical solution which at intervals is pumped from the bottom up-wards by a tiny electric motor.

The lettuces when pulled out of the shingle

are clean and ready for eating to the bottom leaves, without washing.

## Carnations Grow In Glass

When young carnation plants are set out in the shingle they are surrounded with a little glass wool and the soil between them is covered with thin ashestos sheets to check loss of moisture and keep

asbestos sheets to check loss of maway pests and diseases.

"The plants stay in the tanks for three years or more and not only develop a fine "hloom" on the leaves and stems but form howers of glorious colour and size.

Like everyone else, Mr. Mullard is short of labour and to save it he invented a fascinating cut-out device. As soon as the tank is sufficiently full, the liquid drips out into a glass and by weighing it down shuts off the current and stops the pump. It is restarted merely by emptying the glass.

other tanks are being prepared for tomatoes, which have taken to sollless culture so well that I begin to wonder whether Britain's enormous tomato-growing industry will not eventually change over to this method.

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He has made an offer to the Air Ministry and Ministry of Labour to train suitable ex-Service men in the arts of soil-less cultivation so that they can in turn become instructors. Already a few candidates have been selected,





Adjusting the automatic device which controls the supply of special solution to the roots of super-grade lettuces.



Shingle around the roots of carnations is kept moist by glass "wool."



They flourish without soil. Tending young carnation plants grown in shingle protected by glass "wool" and asbestos sheets.