well, but as the fault of condensing steam or moisture on the under side in cold weather and interferes with the moulding and pouring by dropping water where it is not wanted. We recommend slate on iron frames as best and safest.

Replies to Enquiries.

The following replies relate to enquiries recently published in SCIENTIFIC AMERICAN, and to the number therein given:

(3627) A. T. writes in answer to H. D. G. I use 11 cells Julien 5 S type storage and charge with 44 cells gravity, all in series. Have four 16 candle power and three 12 candle power 20 volt Edison lamps. Conductors No. 10 and 12 B. and S. gauge wire. Have not been very successful, owing to great consumption of bluestone and large deposit on zincs. I tried the forms of gravity now sold with porous cups and found them a great improvement, but charging current is so low, could only burn one 16 candle power lamp for three or four hours, or say 18 to 20 hour charging. [The deposit of copper on the zincs, if occurring while charging, is due to insufficient current. If you had 52 gravity cells in two parallel series, the result would be much better, as nearly twice the current would pass. This is on the assumption that the deposition of copper occurs during the charging. If, however, your battery stands long on open circuit, the trouble will inevitably occur. Only plan would be to have some arrangement for drawing off the upper two inches of solutio from the cells when not charging. Forty-four gravity cells on 11 storage cells gives an unnecessarily high voltage. To use that number, place 8 cells in series and place the other 36 in 2 in parallel and 18 in series.—ED.]

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