

the process repeated, the nails are then drawn, the lower box boards taken off, and nailed higher up, and in a few days the upper walls may be ready for the floor timbers, but when not hurried it is well to take the matter leisurely to obviate any chance of the walls falling while green. To shew the cheapness and rapidity with which the shell of a large house may be raised, Mr. Fowler states that he began the building of the house given in the Engraving on a Friday morning, and finished on Saturday in the week following. He then summoned all hands, calculated each man's labour and time, the cost of materials, and arrived at the following result, excluding the windows, doors, flooring, and roof, which would cost as much as on a brick or stone building :-

Common labor, 44 days at \$12 per month	\$20 00
Carpenter work	7 00
Mason laying window sills, arches, and levelling wall,	2 50
Lime, 250 bush., slacked, at 4 cents per bushel.	10 00
Lumber for standards and top of wall	6 00
1,000 bricks for window sills and arches.	6 50
Board for hands.	12 00
Sand, quarrying stones, nails, horse to haul up, use of boards for troughs, etc.	15 00
Total.	\$79 00

Shewing \$79, or less than £20 currency, in the cost of the shell of a house 256 feet in circumference and 23 feet high.

The builder of this house of gravel and lime wall also thinks that the square form is far inferior to the octagon form in respect to the construction of a house. He suggests that nature's forms are mostly sphericals, and that fruits, eggs, nuts, grains, seeds, &c. are made spherical in order that they may enclose the most material in the least compass, and as the circle encloses more space than any other form, so the octagon, which approximates to the circle, encloses more space than the square, besides being more convenient, warm and comfortable. He contends that it is more convenient because of the facility for entrance and exit, and the opportunity afforded by the shape of the rooms for making numerous cupboards, points of considerable importance in country and farm houses. He also contends that it will be warmer, no unimportant point in a climate like our own, because a room in an octagonal house necessarily presents only one side to the wind, whereas in a detached square house there are commonly two, sometimes as in a room running the whole depth of the house three sides exposed to the wind, and it would obviously be more comfortable if it were at the same time warmer and better fitted with interior conveniences.

People have hitherto built at right angles, because it costs so much to frame other angles, but in the new style of building it is just as easy to build an octagon as a right angle, and the main question to be considered is the point affirmed by Mr. Fowler, as to whether the octagon house when built does really contain more space for a given circumference of wall than the square house. To illustrate this the builder makes a diagram, representing a house thirty-two feet square. This square is necessarily 128 feet in circumference, and encloses 1024 square feet of space, but an octagon on the same scale with a circumference of 128 feet contains 1218 square feet, so that the octagon with the same extent of wall exceeds the square by 194 feet, and gives a gain of one fifth in space over the square, and you have of course the same sized wall for one fifth less money in the cost, or the shell of a house one fifth larger for the same sum, and as this difference is saved in the shell, or as it is technically called the carcass of the house, so also it is saved in the foundation, plastering, painting, white washing, &c., and appertains to materials, labor, and everything required in the construction.

The author thus describes his own residence, of which we are enabled to present the cut :

