J.Park.

Constructing Houses.

Nº62,676. Patented Mar. 5, 1807.

THE GRAPHIC CO.PHOTO-LITH. 39 & 41 PARK PLACE, N.Y.

Anited States Patent Office.

JOHN PARK, OF JOLIET, ILLINOIS.

Letters Patent No. 62,676, dated March 5, 1867.

IMPROVEMENT IN THE CONSTRUCTION OF HOUSES.

The Schedule referred to in these Ketters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JOHN PARK, of Joliet, in the county of Will, and State of Illinois, have invented a new and improved Mode of Constructing Houses; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, forming part of this specification.

The nature of my invention consists in constructing buildings in such a manner as to make them strong, and to require but a small amount of lumber in their construction; also making the walls air-tight, and providing ample ventilation from the cellar to the top of the building.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

Figure 1 is a side elevation of my improved mode of constructing buildings.

Figure 2 is a transverse vertical sectional elevation of the same.

Letters of like name and kind refer to like parts in each of the figures.

A may represent the cellar of my improved plan for building, the walls of which are inclined, as seen at B B, fig. 2. These walls are made of lime and sand, with a sufficient quantity of cement to make them hard, and applied to the earthy walls with a trowel or other convenient means. The bottom of the cellar may be cemented in the same manner as the side walls. CC represents the foundation for the building, and constructed as follows: At about one foot outside from the walls of the cellar, I dig a trench down to a suitable depth, so as to get below the action of frost; then at the surface of the ground I make a box in the form desired, which I usually make in the form as seen at c c, fig. 2, for a mould, or to form the shape of my foundation. I then fill in with cement of water-lime to the trench and box, until the latter is full and level all around, for the foundation. This cement soon sets and becomes hard by the action of the atmosphere, when the box may be removed. This cement is made of sand and lime in proper proportions, with an addition of about one-fifth of cement or waterlime. A foundation made in this manner is very hard and secure, and where it is difficult to obtain stone is an excellent substitute. A foundation made in this manner may be set upon the surface of the ground, or may be settled in the ground, as desired. When the foundation is completed, as above described, I lay the joists D× upon the foundation, and secure them in any well-known way. I then erect the studding, as thick as may be necessary, or at suitable distances apart, and to any desired height, as represented in dotted lines a a a. I then provide lath with the edges bevelled, which I nail to the outside of the studding with the narrow side next to the study, so that a dove-tail is formed to hold the plaster. The inside is lathed in the same manner as the outside, the lath forming a dove-tail, as seen at E, in the transverse sections of the lath. D represents the corner boards, of common construction, secured to the corners of the building for the purpose of securing and protecting the plaster. At each corner of the building I make a box or tube that connects with the cellar and rooms. The said box or tube extends up between the walls, and connects with an air passage between the upper ceiling and roof, in which are ventilators F F F F. These ventilators may be provided with caps, so that they may be opened or closed, as may be desired. The roof of my improved building is supported by rafters or supports of common form. I then put on roof boards, about six inches wide and one inch thick, and nail them transversely to the rafters or joists. I then put on two plies of rough paper, upon which I put a coat of common plaster mortar, about one inch thick, and level it off smooth. When the mortar is dry I put on a thin coat of common pine tar, so that it will not run, upon which I put another coat of paper, and then another thin coat of tar, and then paper, and so on until there are three coats of each evenly put on. Then I sift on fine sand evenly over the roof of paper and tar. I then lay down tile. After the tile is placed so as to cover the roof, then sift sand into the joints between the tile until they are full. I then throw on water to wash off the remaining sand, and to fill the joints full. I then take a rough flat stone, and plane all the edges even with each other; and, if the sand in any of the joints sinks, they can be filled up at leisure. The object of putting on two plies of paper is to separate the mortar from the roof boards, so that it will not adhere; so that, if either the roof boards or plaster expands or contracts, it will not affect the cement, each acting independently of the other. This forms a roof of the hardest cement, and perfectly impervious to water; and will not fracture by expansion or contraction, and is durable and fire-proof. G is the cornice, of common construction, which may be made of wood or sheet metal. It will here be understood that the side walls of the building may be furnished or provided with doors and windows, and may be finished to imitate brick, stone, or marble, as desired. The stude are spiked to the sides of the joists above and below.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

- 1. The ventilators F, in connection with the box or tube, for the purposes and substantially as described.
- 2. I claim the bevelled lath, when applied in the manner and for the purposes herein shown and described.

JOHN PARK.

Witnesses:

WM. GILBERT, A. WILLIAMS.