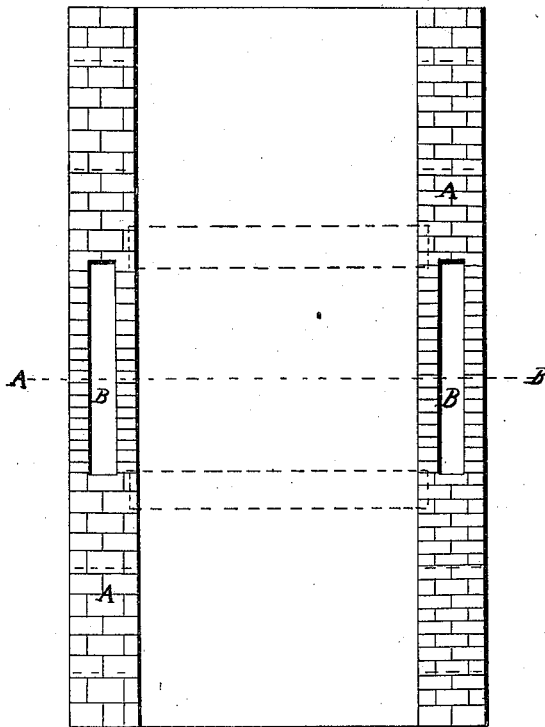


R. Nitson. Picker House.

N^o 55,118.

Fig. 2.



Patented May 29, 1866.

Fig. 3.

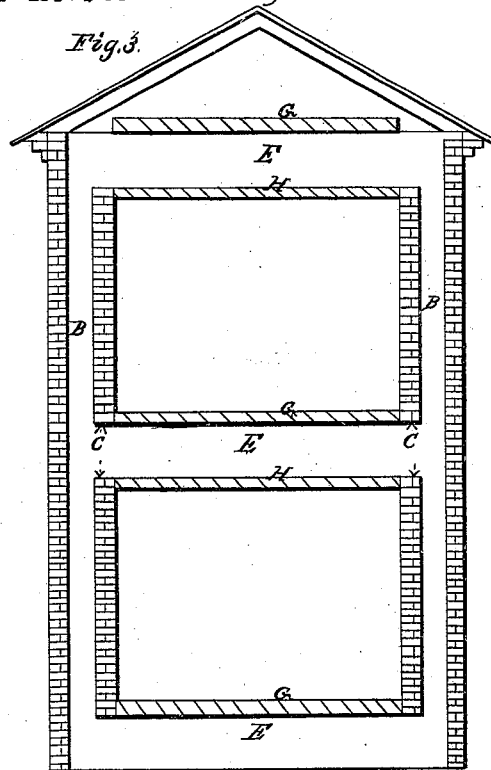
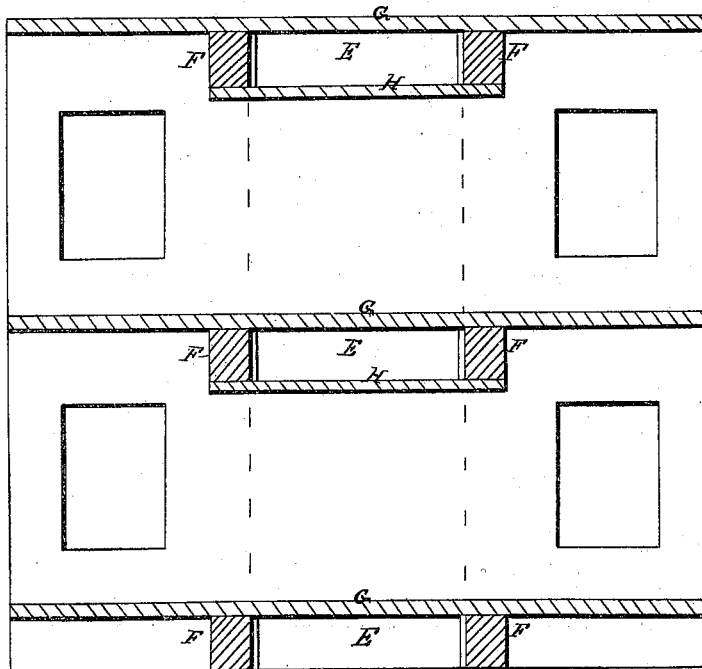


Fig. 1.



Witnesses:
John C. Crane
J. S. Whitney

Inventor:
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UNITED STATES PATENT OFFICE.

RICHARD KITSON, OF LOWELL, MASSACHUSETTS.

IMPROVEMENT IN PICKER-HOUSES FOR OPENING AND CLEANING COTTON, &c.

Specification forming part of Letters Patent No. 55,118, dated May 29, 1866.

To all whom it may concern:

Be it known that I, RICHARD KITSON, of Lowell, in the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Picker-Houses, which are the buildings wherein machinery is employed for opening and cleaning cotton or other fibrous substances; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, which form a part of this specification, in which—

Figure 1 is a longitudinal vertical section; Fig. 2, a plan, and Fig. 3 a transverse section on the line A B of Fig. 2.

My invention consists in constructing the walls of picker-houses with perpendicular flues or passages opposite the spaces between the beams in the side walls of the building, or in the end walls when more convenient, said flues extending from the bottom or near the bottom of the building upward to or near the top, and provided with openings through the inner portion of the walls communicating with the spaces between the beams, or with other inclosed spaces or conveniently-arranged dust-trunks suspended beneath the beams, so that dust-pipes may be connected with any cotton opening and cleaning machinery or apparatus and the inclosed spaces or dust-trunks, and all the fine dust, dirt, and refuse matter which is separated from the cotton may be blown or drawn by a current of air off through the inclosed spaces or dust-trunks and the hollow walls or flues to any convenient place of deposit.

The perpendicular dust-trunks in picker-houses are generally made of wood and arranged within the different apartments, and in many picker-houses the upper rooms only are used for opening and cleaning cotton, while the lower rooms are used for carding or other purposes, and all the perpendicular dust-trunks pass through the lower or carding rooms to the cellar, which is used for deposit of dust and dirt. These perpendicular trunks occupy considerable space which might be used to greater advantage. Besides, in case of fire, which is of frequent occurrence in picker-houses, these wooden trunks add to the combustible material and greatly endanger the building.

The object of this invention is to economize room within the picker-house and to lessen the liability and in many cases prevent the destruction of the building by fires, which frequently occur in cotton opening and cleaning machinery.

In the drawings, A A represent the side walls of a picker-house, in the construction of which perpendicular flues or passages B B are formed within the substance of the said walls. These flues extend from the bottom or near the bottom of the walls upward to or near the top of the same, and are provided with openings C C, made through the inner walls, said openings communicating with the spaces E between beams F F, the floors G on the top of the beams, and casings H, secured to the under side of the same inclose the spaces between the said beams, thus forming convenient dust-passages, through which the dust, dirt, and refuse matter which is separated from the cotton may be blown or drawn by a current of air off through the inclosed spaces E and the hollow walls or flues B B to any convenient place of deposit.

I sometimes construct a separate dust-trunk and suspend it from the ceiling beneath the beams and connect said dust-trunk with the perpendicular flue within the side or end walls of the building, in which case the spaces between the beams are not inclosed.

The dust may be conveyed from cotton opening and cleaning machines to the inclosed spaces E or dust-trunks suspended beneath the beams through pipes or tubes, one end of which would connect with the machine, and the other end with the inclosed space or dust-trunk, either downward through the floor G or upward through the casing H or the bottom of a dust-trunk, so that the dust and dirt may pass through said pipes or tubes into the inclosed spaces or dust-trunks to be blown off, as above stated.

The interior of the flues or passages B B should be smoothly plastered with mortar or cement to prevent dust or dirt adhering to the sides of the same, and the inclosed spaces or dust-passages E E may be lined with any fire-proof substance, so that slight fires would do no great injury to the interior surfaces.

In order to apply my improvement to existing picker-houses it will be necessary to widen

the walls from top to bottom of such buildings by building on (between the windows) sufficient width to form a flue from cellar to attic, so that either of the latter can be used as a dust-room, or said dust can be conveyed to some other point from the flues, if desired, and deposited in a chimney or other suitable inclosure.

I claim—

The hollow walls or flues B B and openings C, in combination with the inclosed spaces between the beams or their equivalents, the whole arranged substantially in the manner and for the purpose specified.

RICHARD KITSON.

In presence of—

JOHN E. CRANE,

J. S. WHITNEY.