

*J. Binns,
Flue Block.*

No 78,717.

Patented June 9, 1868.

Fig 3.

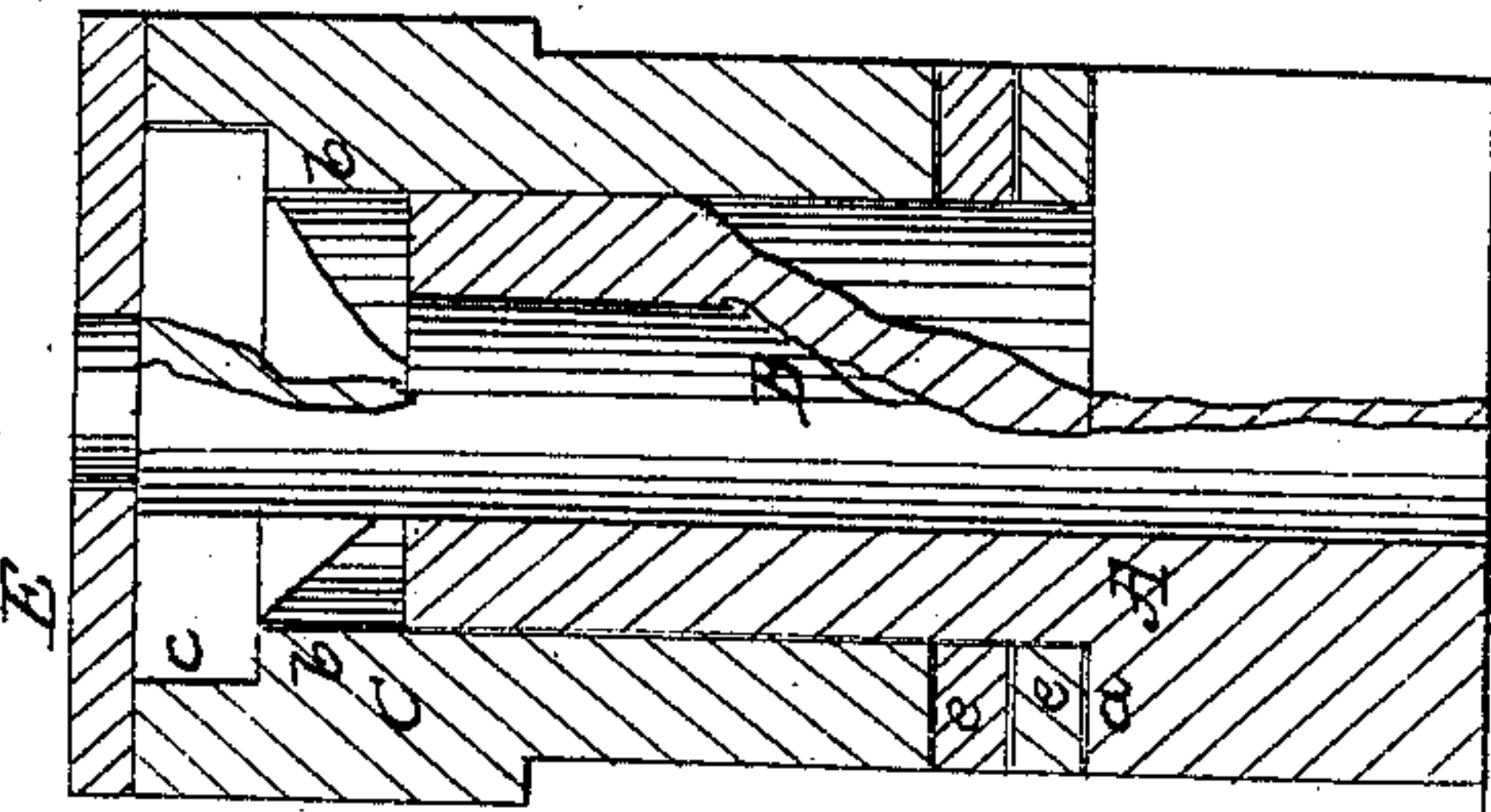


Fig 6.

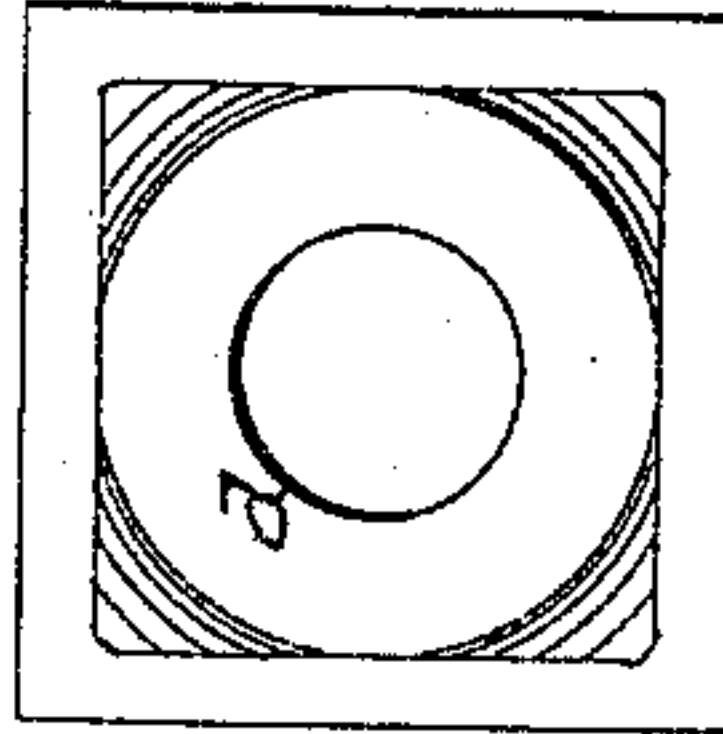


Fig 2.

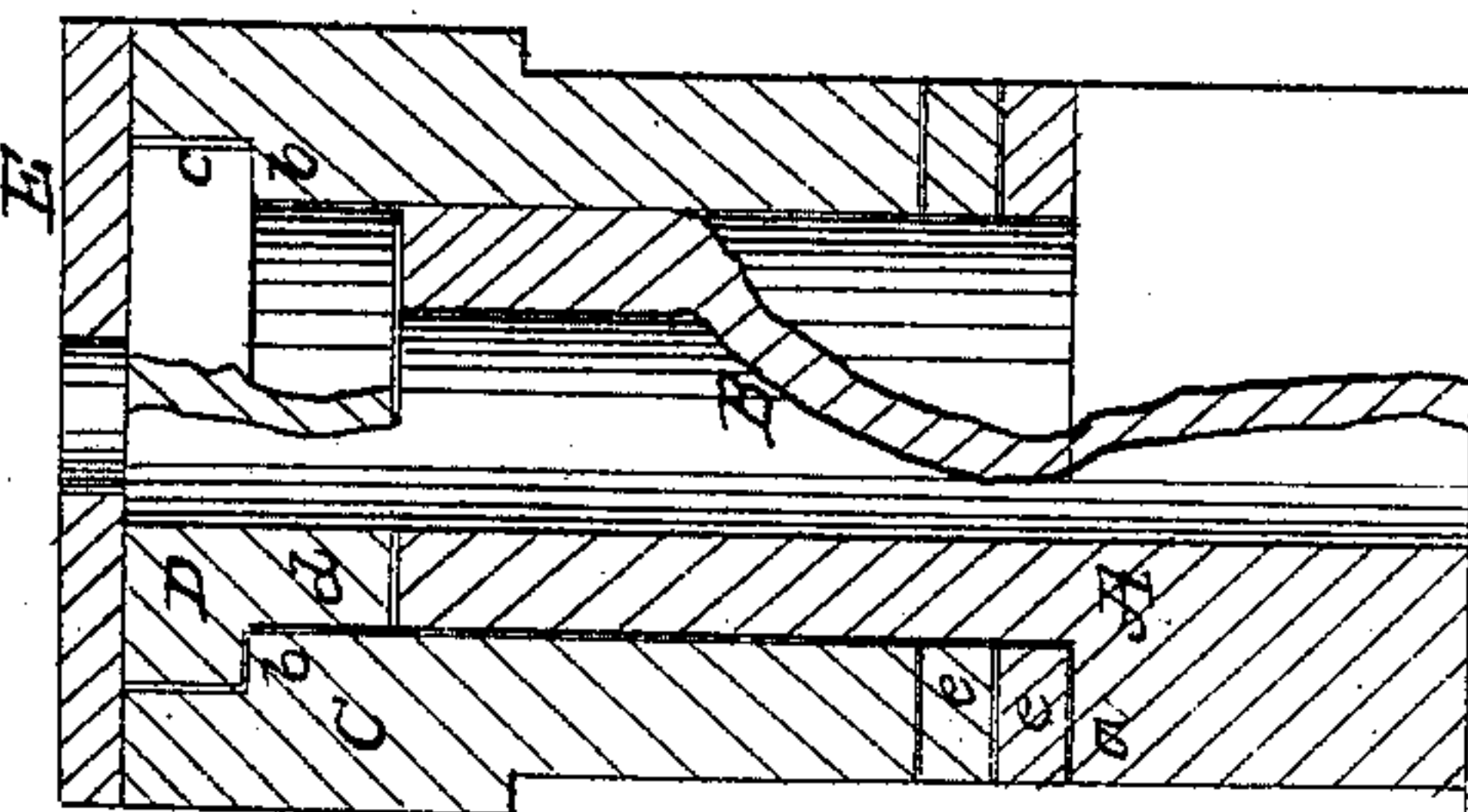


Fig 5.

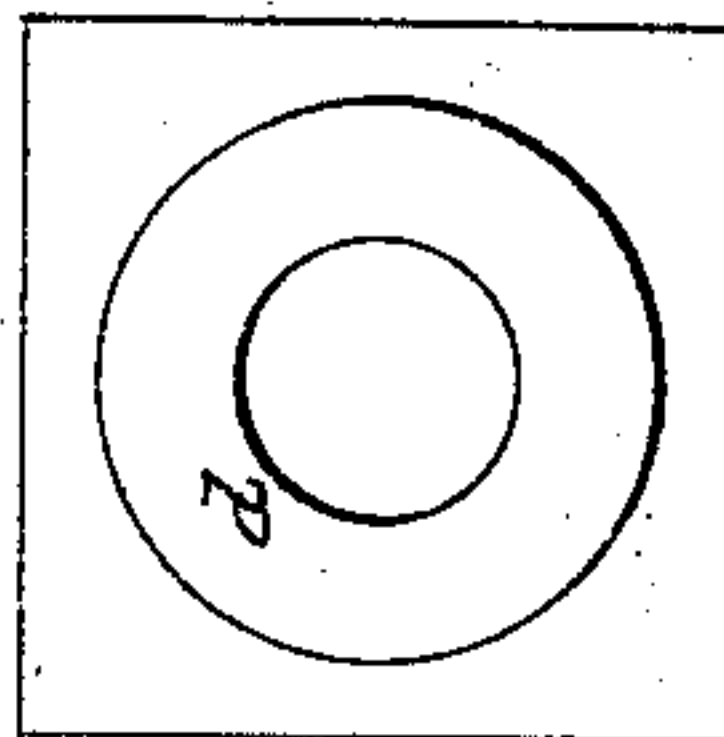


Fig 1.

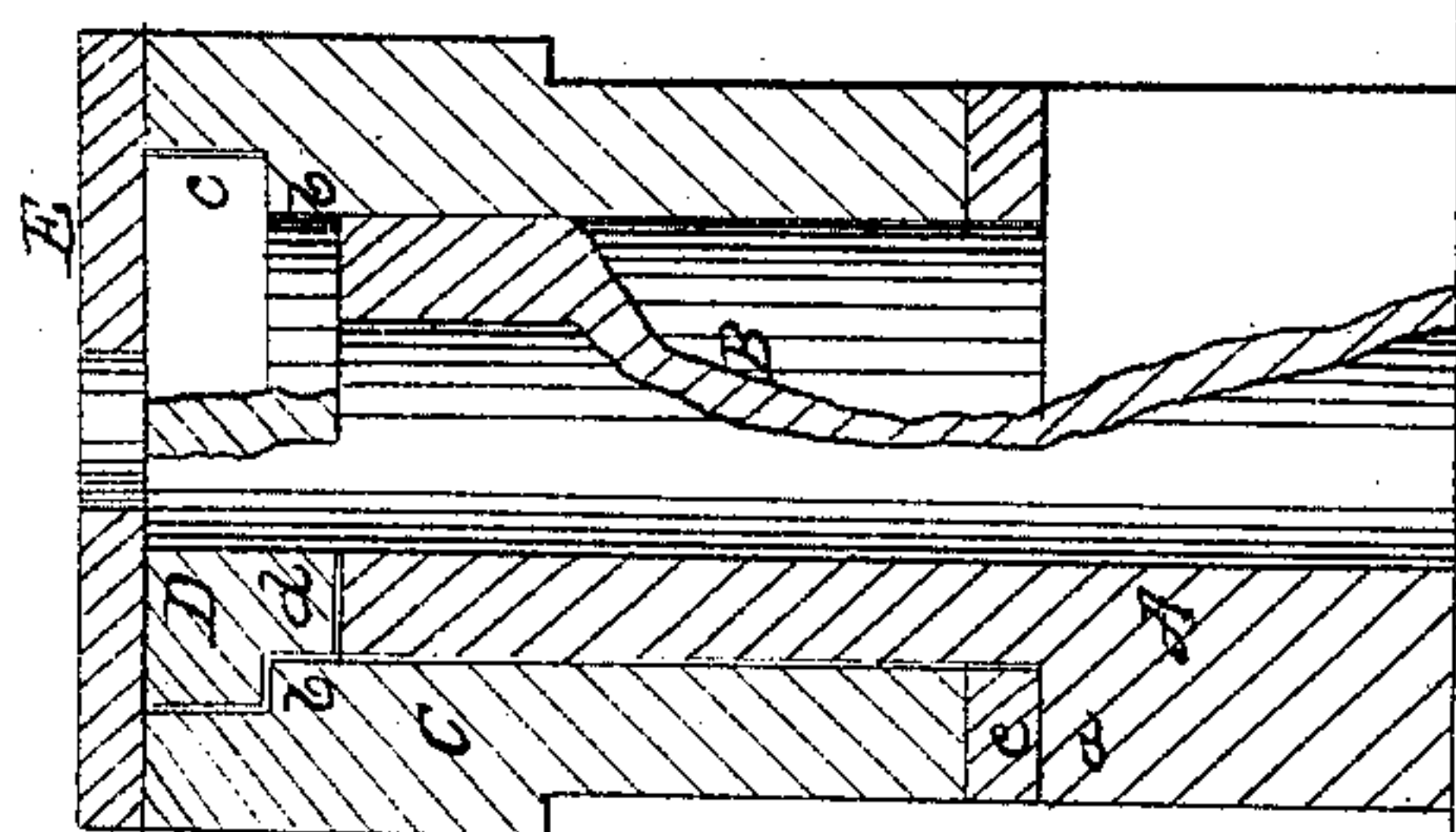
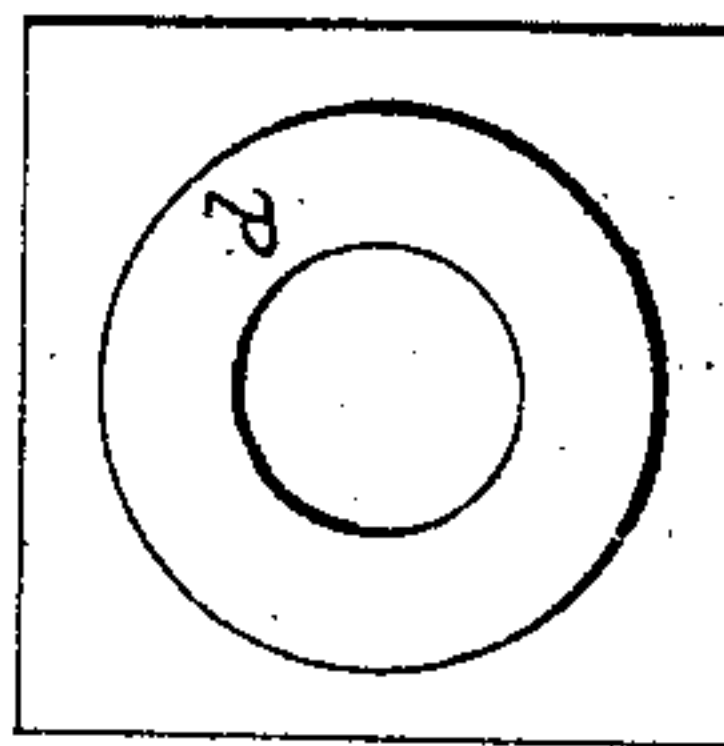


Fig 4.



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United States Patent Office.

JOHN BINNS, OF OSKALOOSA, IOWA.

Letters Patent No. 78,717, dated June 9, 1868.

IMPROVEMENT IN FLUE-BLOCKS.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JOHN BINNS, of Oskaloosa, in the county of Mahaska, and State of Iowa, have invented a new and improved Flue-Block; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to a new and improved flue-block for stove-pipes to pass through in a partition or flooring, in order to prevent heated pipes from firing the building. These blocks have hitherto been cut out of stone, at a considerable expense.

My invention consists in moulding them of clay, and then burning them so as to form a material like the common brick or fire-brick, whereby a much cheaper fire-block than those now manufactured is obtained, much lighter, not liable to be affected by heat, and more desirable in every respect.

In the accompanying sheet of drawings—

Figures 1, 2, and 3, represent vertical central sections of the mould used in manufacturing my invention.

Figures 4, 5, 6, side views of my improved flue-block.

Similar letters of reference indicate like parts.

I construct my improved flue-block of either fire-clay or the ordinary brick-clay, and mould the same as follows: The mould is constructed of wood, and consists of a block, A, having a shoulder, *a*, all around it at its lower part, and a cylindrical hole made longitudinally and centrally through it to receive a core, B.

Besides this part A, there is another part, C, which is fitted over A, and is provided with a shoulder, *b*, internally at each side to form a square recess or chamber, *c*, at its upper part, the interior of C, below the shoulder *b*, being of circular form, and the exterior of A, above the shoulder *a*, being of cylindrical form.

The lower end of the upper part C of the mould rests upon the shoulder *a*, and the clay, D, is moulded in the space at the upper end of A and C and around the core B. The tubular portion, *d*, of the flue-block may be made of greater or less length by putting one or more sections, *e*, on the shoulder *a* of the part A of the mould.

When the space in the mould is filled, a cap, E, is placed on the top of C, the mould inserted, and the core B and the parts A C raised, leaving the moulded clay on E. The latter is then dried and baked, like ordinary brick.

These flue-blocks, it will be seen, may be very cheaply manufactured, and they will be extremely durable, light, and far preferable to the ordinary stove-blocks now used.

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

The combination of the hollow cylindrical block A, having an outer shoulder, *a*, the outer cylindrical block C, having internal shoulders *b* under its upper end, to form a square chamber, the core B, sections *e*, and perforated cap E, all constructed and arranged as shown and described, for the purpose specified.

JOHN BINNS.

Witnesses:

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