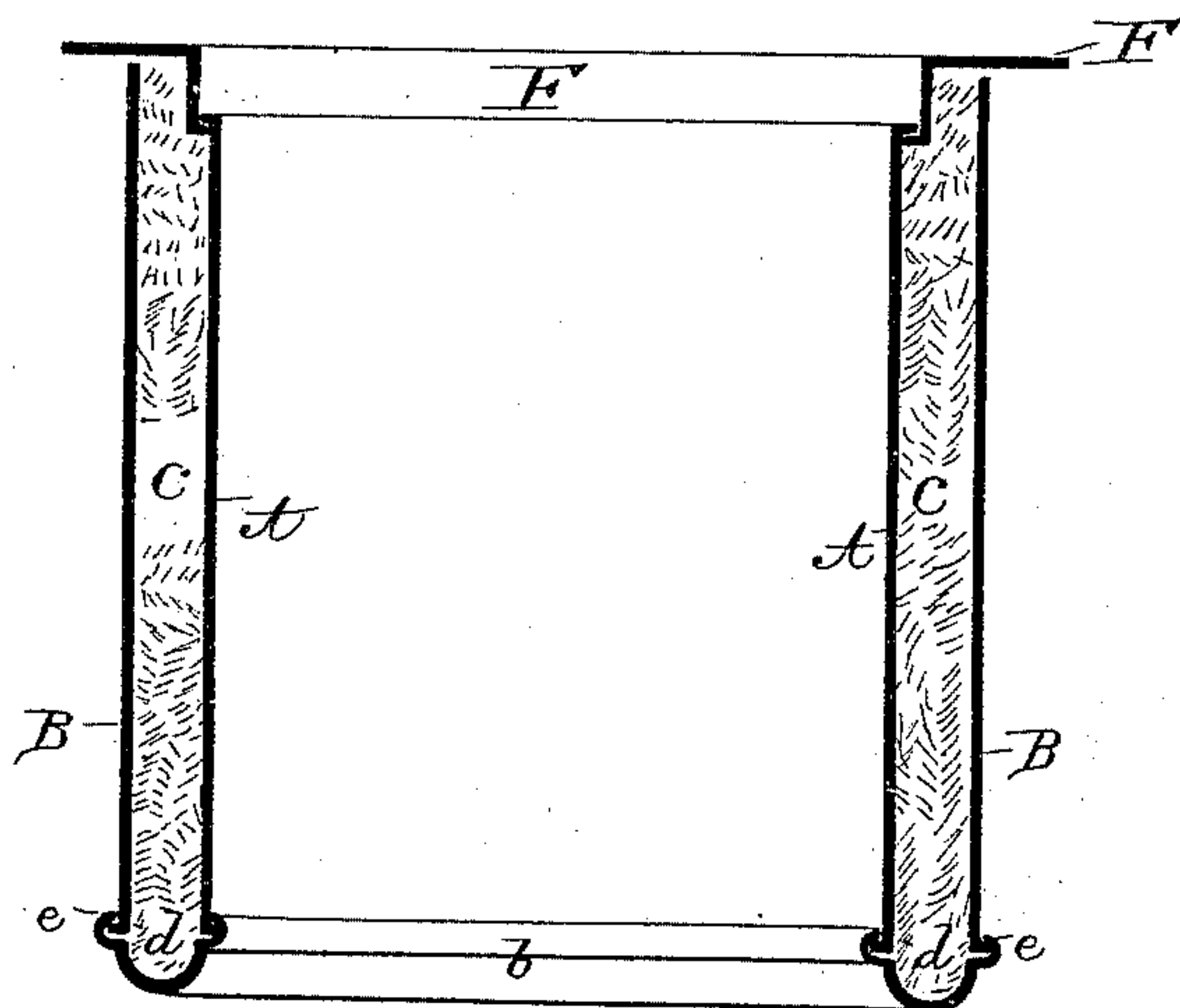


(No Model.)

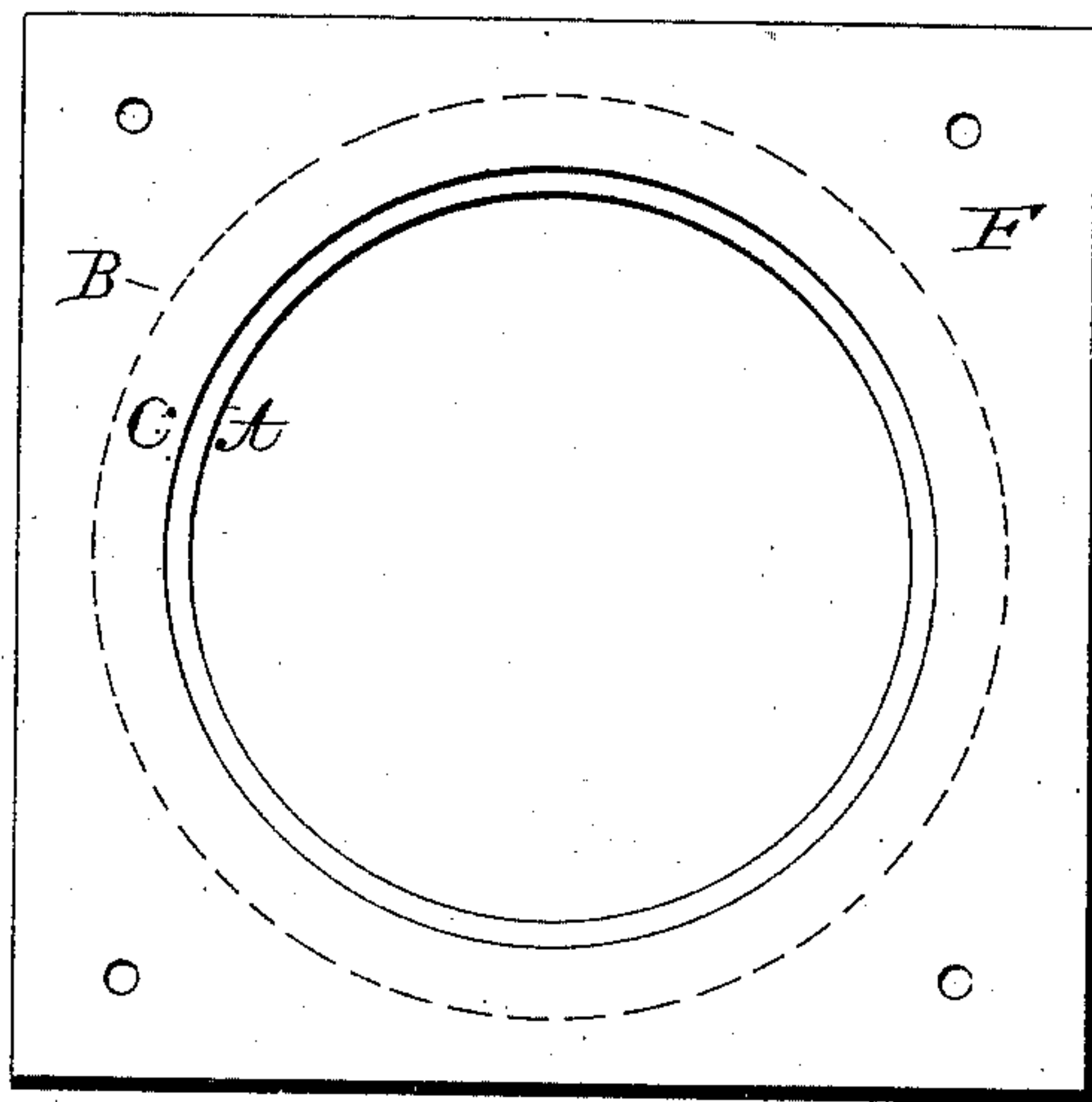
A. FAIRGRIEVE.  
STOVE PIPE THIMBLE.

No. 442,965.

Patented Dec. 16, 1890.



*Fig. 1.*



*Fig. 2.*

Witnesses.

Arthur Ashley  
Geo. R. Bixington

Inventor

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Atty

# UNITED STATES PATENT OFFICE.

ARCHIBALD FAIRGRIEVE, OF TORONTO, CANADA.

## STOVE-PIPE THIMBLE.

SPECIFICATION forming part of Letters Patent No. 442,965, dated December 16, 1890.

Application filed March 26, 1890. Serial No. 345,380. (No model.)

*To all whom it may concern:*

Be it known that I, ARCHIBALD FAIRGRIEVE, a subject of the Queen of Great Britain, residing at the city of Toronto, in the Province of Ontario, Dominion of Canada, have invented certain new and useful Improvements in Stove-Pipe Thimbles, of which the following is a specification.

The accompanying drawings represent one form of my thimble.

Figure 1 is a sectional elevation, and Fig. 2 is a plan of the same.

My invention essentially consists in constructing a sheet-metal cylinder of such diameter as to permit the stove-pipe to pass easily through it, and surrounding that cylinder with another sheet-metal cylinder of such diameter as to leave an annular space between them, in connecting the ends of the two cylinders together by metal connections, and in filling the annular space with a light fire-proof material, such as asbestos fiber or mineral wool.

Referring to the drawings, Fig. 1, A is the inner cylinder, of sheet metal, such as tinplate. B is the outer cylinder. C is the annular space between them.

b is a circular end piece made of sheet metal by stamping; but it may be of cast metal.

The inner and outer cylinders are connected to b in the following manner: A slight turn or bulge of the metal at end of the cylinder is made, as shown at d d. The circular end piece b is made of the section shown, and forming steps upon which the cylinders A and B rest, and has sufficient width to allow the turn-overs or bulges d d to come within its flanges e e. The metal e e is then turned over and secured upon the bulges d d, and thereby firmly fixes each cylinder in its true

position and leaving the annular space C between them. I then fill the space C with such fire-proof or non-conducting material as asbestos fiber or mineral wool. The disk or flange F, which is of metal, either cast or sheet, is then put on and secured to the inner cylinder, as shown on the drawings, by turning over the end of the cylinder upon the projection made on F. The flange F is shown square, and is so made for thimbles used in passing through floors and in some forms of partition-walls, but may be round or octagonal or other shapes. I also make them without a square flange and connect the two cylinders at each end in the same manner, as shown by b, and already described. In such cases I usually rivet a strap or straps of sheet metal to the outer cylinder, so that by means of the straps the thimble may be secured in its proper position in the wall.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination of two cylinders having the flanges e, the circular end pieces having the bulges d, in which the flanges e enter, and the filling in the space C for holding the cylinders apart and the flanges in the bulges.

2. The combination of two cylinders having the flanges e and the outer one having straps of metal riveted to the outside thereof, the circular end pieces having the bulges d, in which the flanges e enter, and the filling in the space C for holding the cylinders apart and the flanges in the bulges.

ARCHIBALD FAIRGRIEVE.

Witnesses:

K. FRASER,  
A. FRASER.