

No. 708,725.

Patented Sept. 9, 1902.

N. MERLEY.
BUILDING BLOCK DIE.
(Application filed Apr. 17, 1902.)

(No Model.)

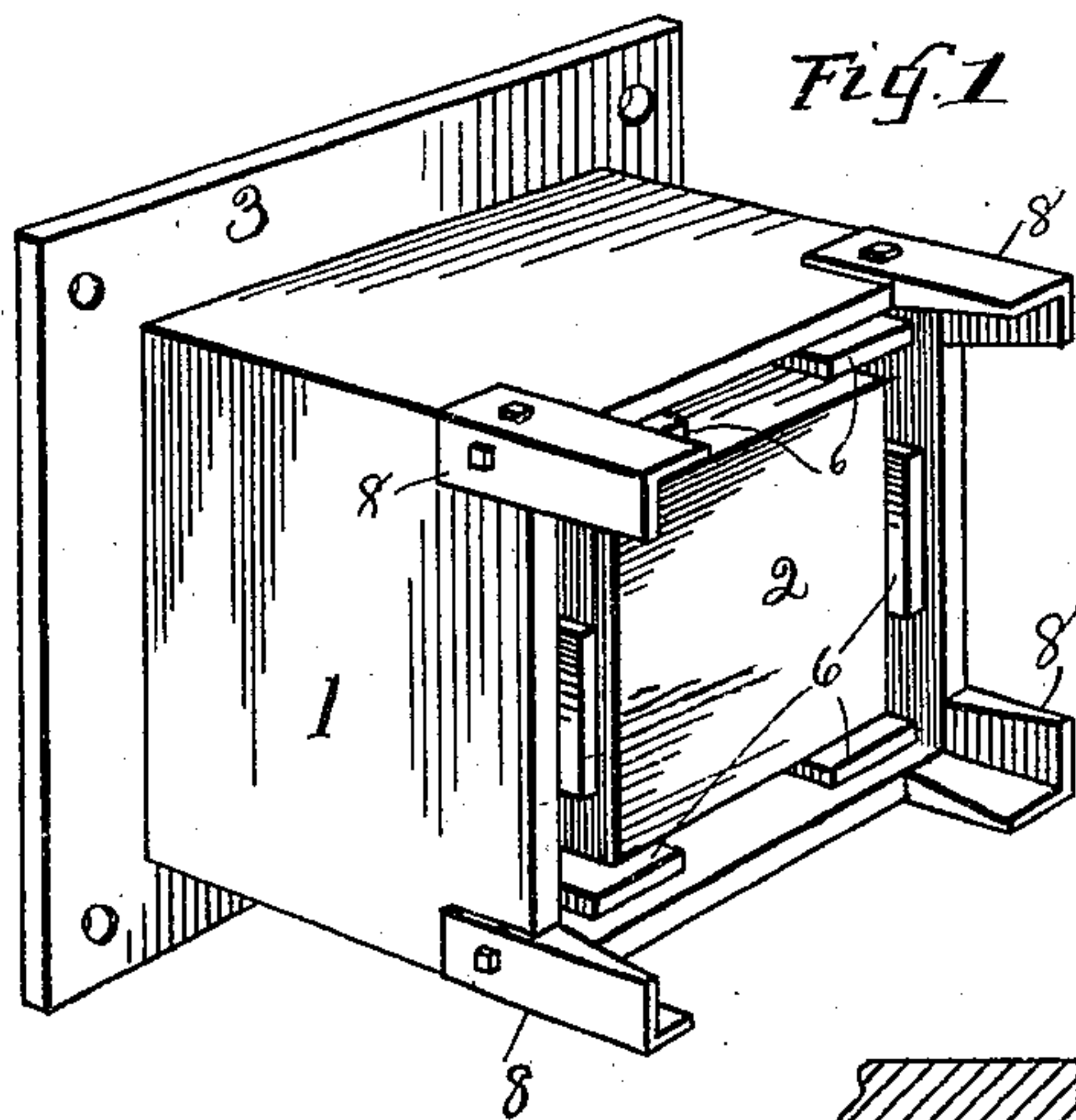


Fig. 1

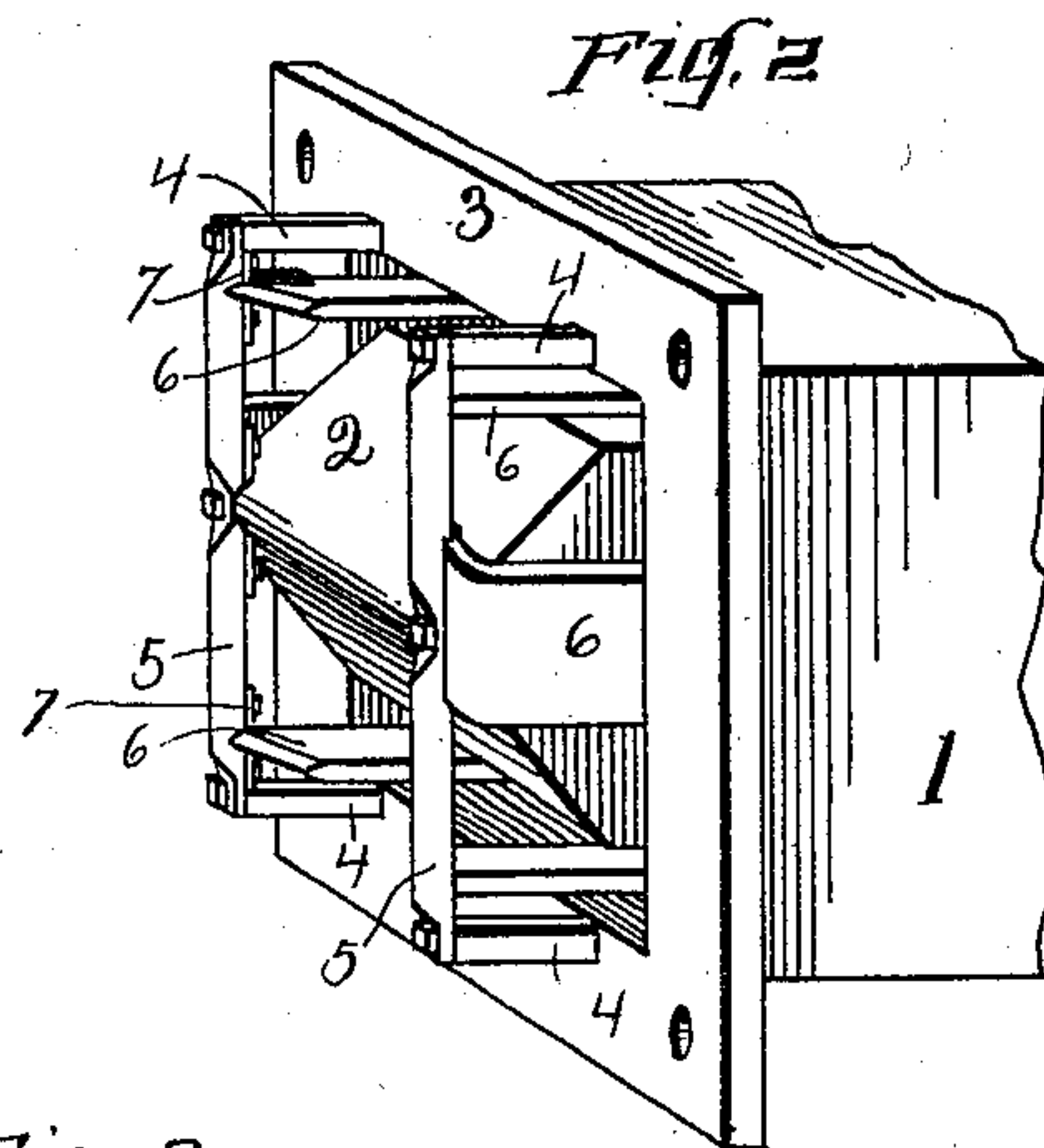


Fig. 2

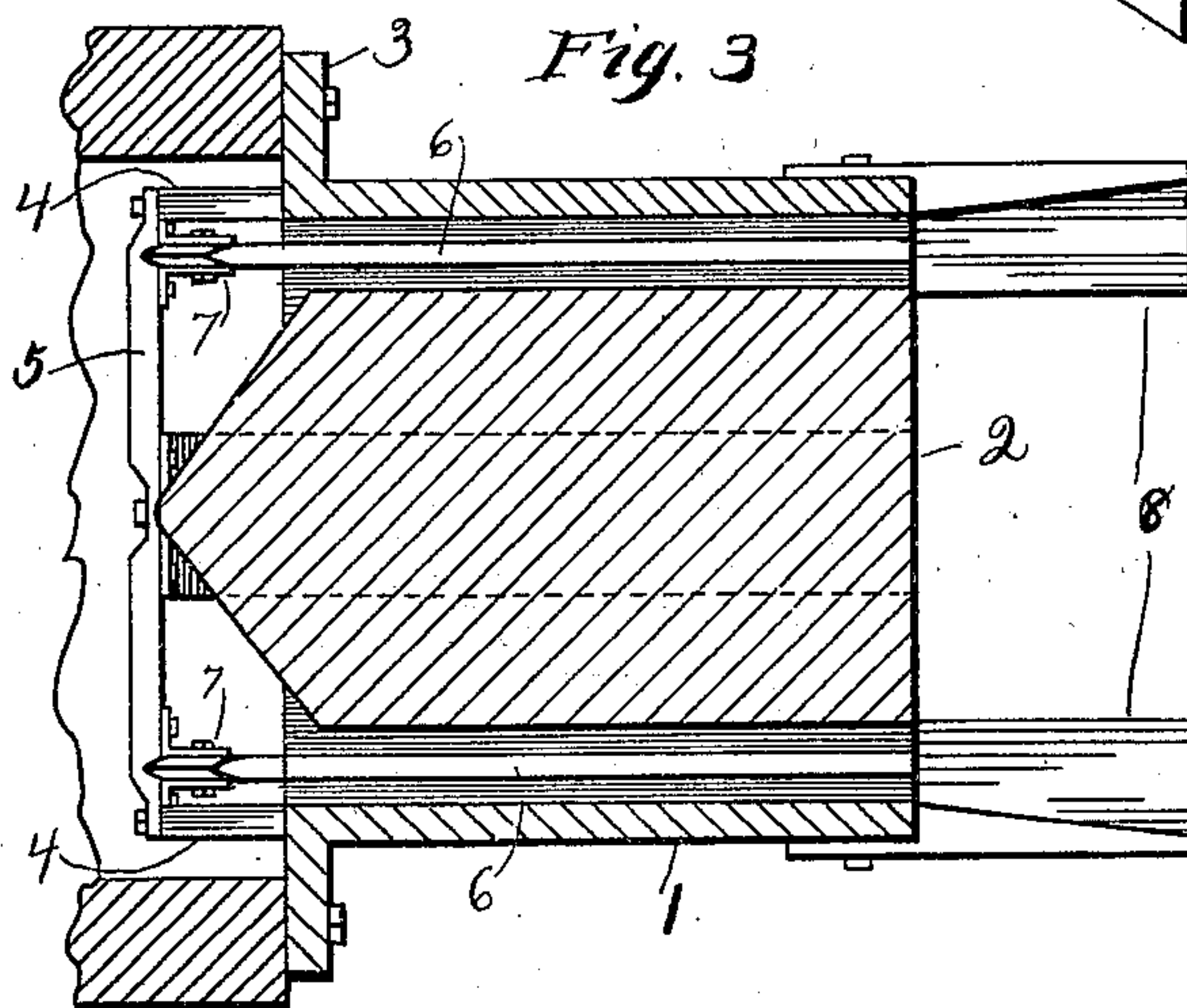


Fig. 3

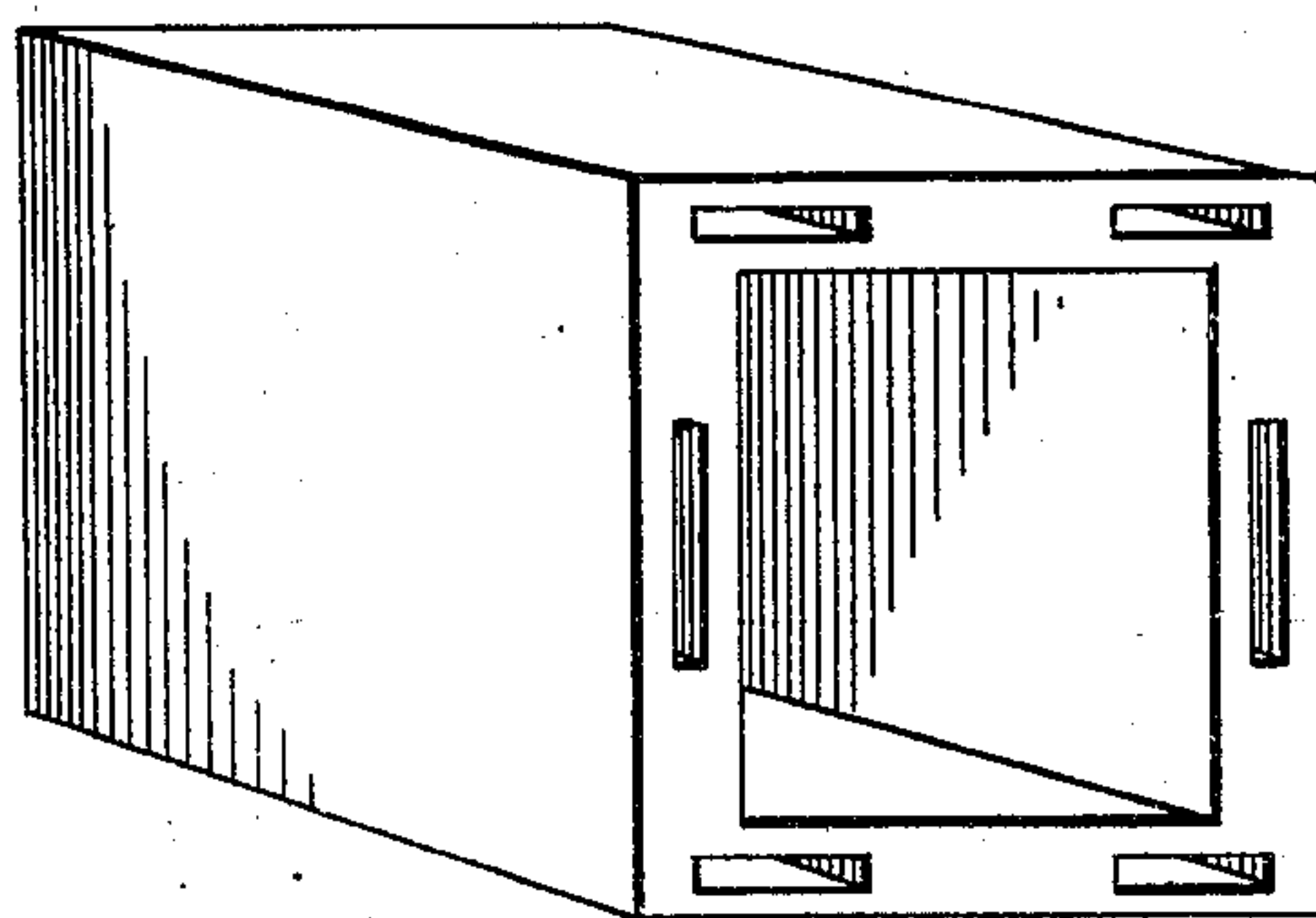


Fig. 4

Witnesses
W. H. Stough
J. R. Bond.

Inventor
Nicholas Merley
By J. R. Bond
Att'y.

UNITED STATES PATENT OFFICE.

NICHOLAS MERLEY, OF CANTON, OHIO.

BUILDING-BLOCK DIE.

SPECIFICATION forming part of Letters Patent No. 708,725, dated September 9, 1902.

Application filed April 17, 1902. Serial No. 103,306. (No model.)

To all whom it may concern:

Be it known that I, NICHOLAS MERLEY, a citizen of the United States, residing at Canton, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Building-Block Dies; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the figures of reference marked thereon, in which—

Figure 1 is a perspective view showing the outlet end of the die. Fig. 2 is a perspective view showing the inlet end of the die and its different parts. Fig. 3 is a longitudinal section. Fig. 4 is a view showing a finished building-block.

The present invention has relation to dies calculated and designed to produce hollow building-blocks from plastic clay; and it consists in the novel construction hereinafter described, and particularly pointed out in the claims.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

In the accompanying drawings, 1 represents the outer shell of the die, which is formed of a size to correspond substantially with the size of the block, it being understood that the inner dimensions of the shell are to correspond with the outer dimensions of the block to be produced. Within the shell 1 is located the core 2, which is formed of a size to give the desired thickness to the shell of the building-block, and of course the distance between the inner surfaces of the shell 1 and the outer faces of the core 2 will be the thickness of the shell of the block.

The shell 1 is provided with a flange 3, which flange is for the purpose of providing a means for connecting the herein-described die to the end of the machine used to force the plastic clay through the die. The machine proper forms no particular part of the present invention, and hence it is not illustrated, as it will be understood that various kinds and styles of machines can be used without any reference to my improved die.

To the flange 3 or its equivalent are connected or formed integral therewith posts or

arms 4, to which posts or arms are securely attached the cross-bars 5, which cross-bars are for the purpose of attaching and holding in proper position the core 2. For the purpose of causing the plastic clay to move past the end of the core said core is beveled substantially as illustrated in the drawings, it being understood that any angularity of the bevel may be provided, as this is a matter of judgment only.

In the construction of building-blocks it is important that the shell thereof be provided with openings for the reception of mortar or cement, so as to properly bind the adjacent ends of the building-blocks together when placed in a wall. To accomplish this object and purpose, I provide any desired number of bars or cores 6, which bars or cores may be located and arranged as shown in the drawings, or they may be differently arranged, reference being had to the number of apertures designed to be formed in the finished block and their location.

Should it be desired to press upon one face of the building-block any desired configuration by any of the well-known means, the bar or core 6 may be dispensed with upon that particular side, this, however, being a matter of judgment in the manufacture of the blocks.

The bars or cores 6 are attached to the cross-bars 5 by means of suitable angle-bars 7 or their equivalents, as it will be understood that it is immaterial as to the exact manner of connecting the bars or cores, except that they must be so connected that they will extend parallel through the space between the inner surface of the shell 1 and the outer surface of the core 2.

It is well understood that in the manufacture of building-blocks the plastic clay must necessarily be compressed, and as it passes from the die the corners are apt to expand to a certain extent, and the expansion being irregular rough and ragged corners are produced. For the purpose of overcoming this difficulty I connect to the corners of the die angled extensions 8, which angled extensions are flush at their inner ends with the inner face of the shell, but are beveled as they extend away from the shell, the angled extensions 8 being beveled in each direction, so as to free the plastic clay in a gradual

manner as it passes the angled extension 8. It will be understood that by this peculiar arrangement I am enabled to produce smooth-cornered building-blocks, so that when they
5 are placed in a wall neat-fitting joints can be made, thereby giving a pleasing appearance to the finished wall.

I am enabled by the angled extensions to overcome another difficulty in the manufacture of building-blocks, which is the cracking
10 that may take place at the time the plastic clay leaves the die proper, thereby producing clean and smooth-cornered building-blocks.

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

1. The combination of an outer shell or die
20 provided with a flange, a core located within the shell and spaced from the inner sides

thereof, posts or arms connected to the flange of the shell, cross-bars secured to the posts, bars or cores located in the space between the outer shell and the inner core and extended
25 parallel with the inner and outer faces of said parts, and the cross-bars and the inner core beveled upon their rear edges or ends, substantially as and for the purpose specified.

2. A die of the class described, an outer shell, a core located therein, and angled ex-
30 tensions secured to the shell of the die and provided with inner beveled faces, substantially as and for the purpose specified.

In testimony that I claim the above I have
35 hereunto subscribed my name in the presence of two witnesses.

NICHOLAS MERLEY.

Witnesses:

J. A. JEFFERS,
F. W. BOND.