

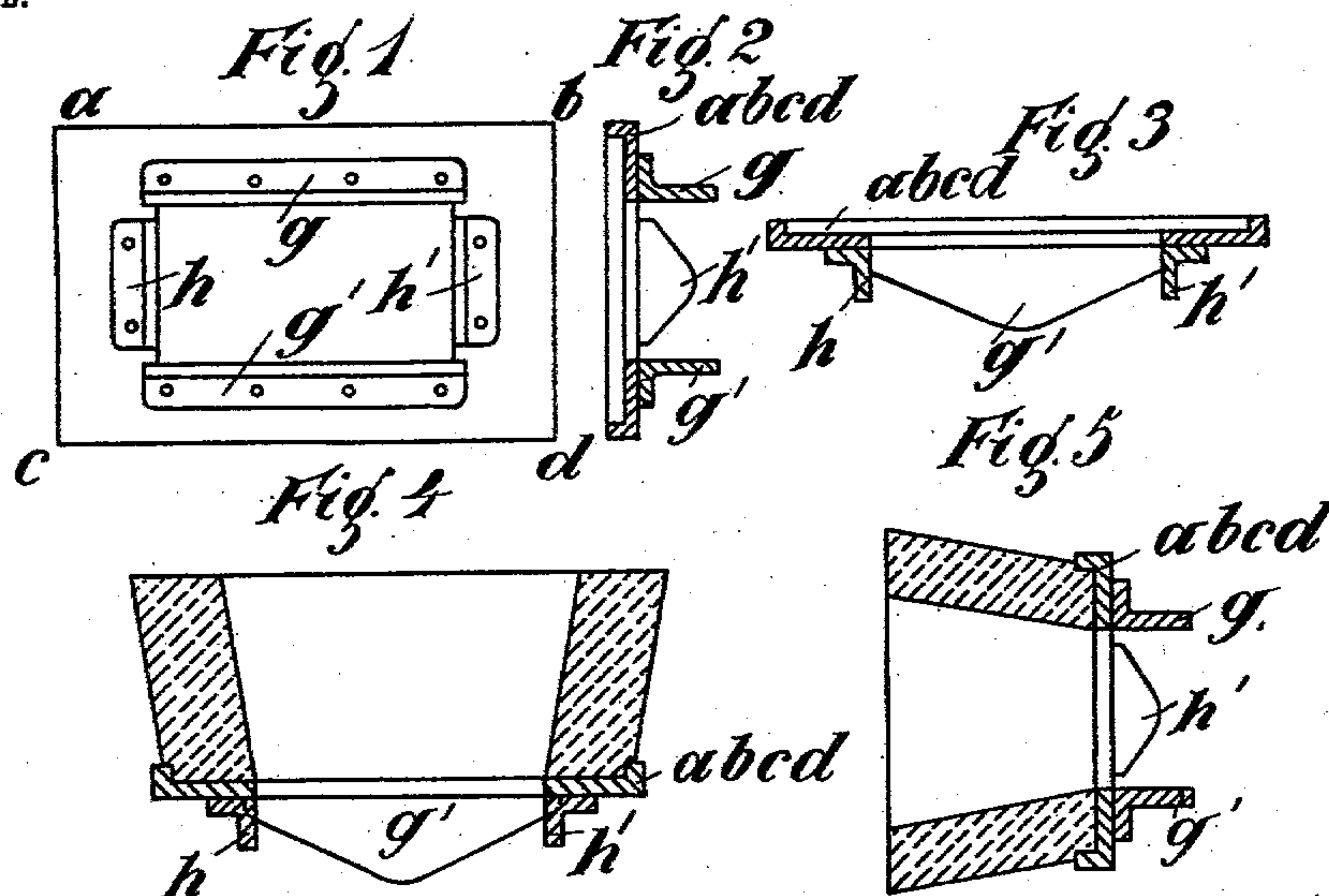
No. 720,973.

PATENTED FEB. 17, 1903.

C. SCHLICKEYSEN.
BRICK COLUMN DIE.

APPLICATION FILED AUG. 8, 1900.

NO MODEL.



Witnesses:
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UNITED STATES PATENT OFFICE.

CARL SCHLICKEYSEN, OF RIXDORF, NEAR BERLIN, GERMANY.

BRICK-COLUMN DIE.

SPECIFICATION forming part of Letters Patent No. 720,973, dated February 17, 1903.

Application filed August 8, 1900. Serial No. 26,272. (No model.)

To all whom it may concern:

Be it known that I, CARL SCHLICKEYSEN, manufacturer, a subject of the King of Prussia, German Emperor, residing at Rixdorf, near Berlin, in the Kingdom of Prussia, German Empire, have invented new and useful Improvements in Brick-Column Dies, of which the following is a specification.

My invention relates to brick-column dies for brick-presses, and it comprises a die formed in two parts, one part forming the feeding-channel and the other part the molding-mouthpiece.

It further comprises the particular arrangement of the mouthpiece, to be hereinafter described, and particularly pointed out in the claims.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a plan view. Figs. 2 and 3 are sectional views of the mouthpiece. Figs. 4 and 5 are sectional views of the complete die.

In Figs. 1, 2, and 3, *a b c d* represent the bed-plate of a die for ordinary building-bricks, which has a free orifice of the shape of a brick. The peripheral or inclosing walls of this orifice are at right angles to the plate *a b c d* and are planed smooth. Instead of the taper of the outlet-orifice varying as heretofore for different kinds of clay there are employed cheeks *g g' h h'*, which, as shown, are bolted on the outside of the die-plate at right angles to it in such a manner as to constitute a continuation of the outlet-orifice, and so as to form internally, in combination with the brick-orifice, a pressing-die. The four cheeks *g g' h h'* so arranged inclose the clay column and retard its exit at all places where they are in contact with the clay and most where they are widest, so that the clay enters with great force into the corners, which offer but very slight frictional resistance, and the clay is thus subjected to sufficient pressure to make it leave the mold with sharp edges. As the edges that surround the column are everywhere at right angles in order to suit the plasticity of the clay under treatment, the outwardly-projecting cheeks can be made wider or narrower toward the center, as required, and the die-pressure on or toward

the edges of the clay can be increased or diminished. By means of these cheeks bolted onto the die-plate the maintenance of the outlet-orifice in good condition is greatly facilitated, because with this arrangement of the die it is merely necessary to shift the cheeks inward when they have become worn on their inner surfaces in the course of time, and by this means always to restore the original size of the orifice, and consequently also the shape of the column. In this connection it is to be noted that with many kinds of clay it is of advantage for the formation of sharp edges that the surfaces of the cheeks bolted on outside should extend almost up to or even beyond the sharp edges, (see Fig. 1,) so that the column being pressed out with sharp edges can be additionally smoothened on its exit by these narrow projecting surfaces.

When it is required to press solid or full bricks, the above-described die-plate is bolted onto the exit end of a channel, which is attached to the casing of the brick-press and which has in cross-section a square or elongated conical or cylindrical form, such as shown in Figs. 4 and 5, and with its orifice fitting exactly against this channel. This feed-channel (shown in Figs. 4 and 5) has for its object to impart to the clay by compressing it during its passage the requisite firmness, denseness, and external shape; but the clay acquires its smooth surfaces, and sharp corners only after passing through the die-plate with its rectangular cheeks. This combination or construction of the brick-pressing die from two mechanical parts which have no constructional correlation is new and allows of adapting or altering each of them separately to suit the properties of the clay under treatment, according to its particular purpose, and of substituting one part for another. The division of the die into a clay-feeding channel and a clay-molding mouthpiece allows first of making it in various sizes, all fitting one and the same clay-feeding channel, and of applying the mouthpiece in various ways in front of or against the feeding-channel, as shown in Figs. 4 and 5, by arranging the orifice of the feeding-channel exactly against the inside wall of the brick-pressing die.

Having now described my invention, what I desire to secure by Letters Patent of the United States is—

1. A brick-column die for brick-presses,
5 having a flat plate adapted to be attached to a feeding-channel of a brick-press, and a rectangular opening in said plate, and a pair of guide-pieces forming elongations of the boundary-surfaces of said opening and extending
10 beyond the respective corners of the latter, said guide-pieces extending rectangularly to the said plate, the boundary-surfaces of the opening of the latter lying also rectangularly to the front and rear surfaces of the plate,
15 and another pair of guide-pieces arranged in the same manner, and terminating at some distance from said corners, for the purpose as described.

2. In a brick-column die for brick-presses, the combination with a flat plate *a, b, c, d* 20 adapted to be attached to a feeding-channel of a brick-press, and having a rectangular opening, the boundary-surfaces of which lie rectangular to the front and rear surface of said plate, of a pair of guide-pieces *g g'* ex- 25 tending beyond the respective corners of said opening and another pair of guide-pieces *h h'* terminating at some distance from said corners, for the purpose as described.

In witness whereof I have hereunto set my hand in presence of two witnesses.

CARL SCHLICKEYSEN.

Witnesses:

WOLDEMAR HAUPT,
HENRY HASPER.