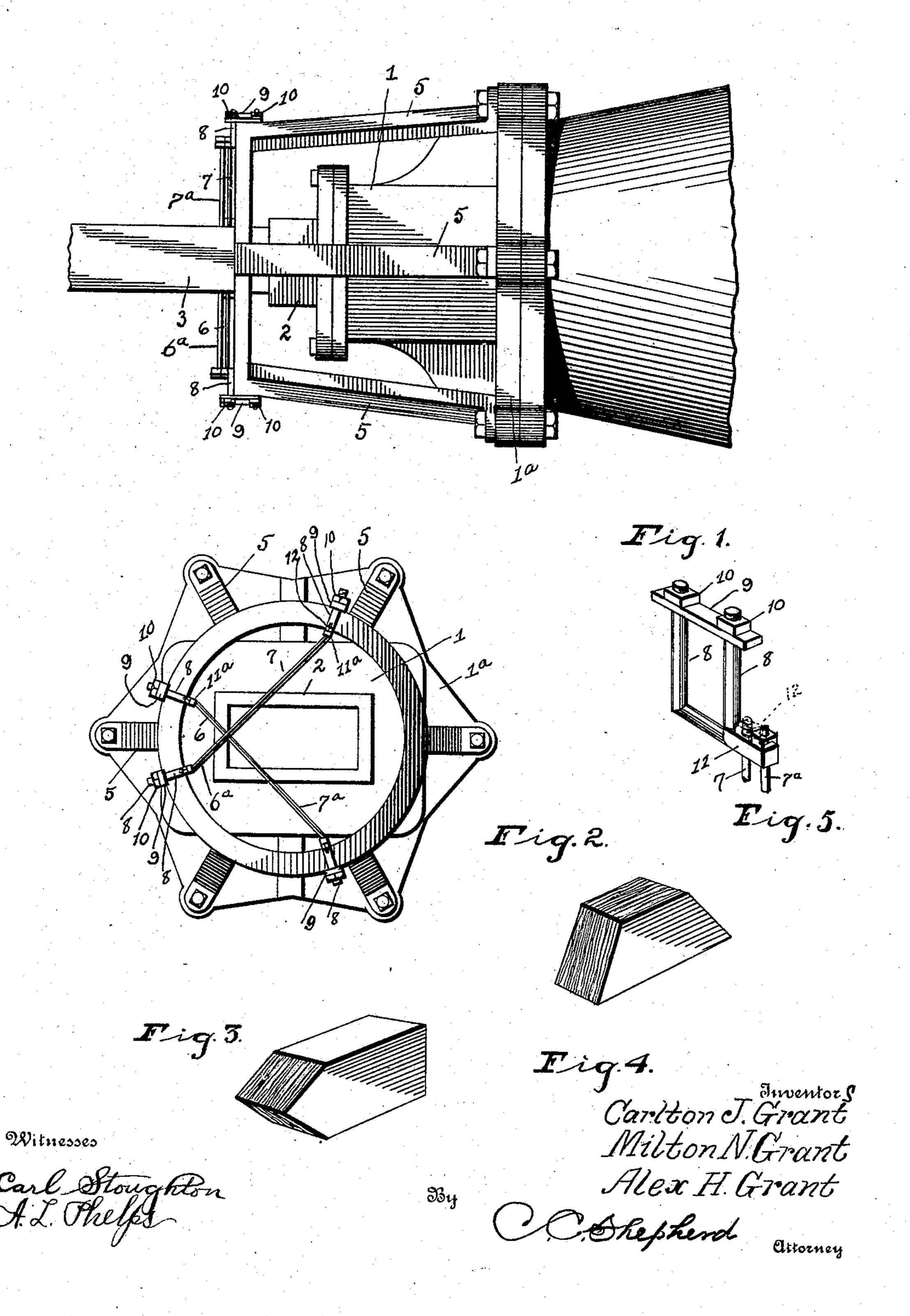
## M. N., C. J. & A. H. GRANT. ATTACHMENT FOR BRICK MACHINES. APPLICATION FILED FEB. 13, 1908.

900,521.

Patented Oct. 6, 1908.



## UNITED STATES PATENT OFFICE.

MILTON N. GRANT, OF COLUMBUS, AND CARLTON J. GRANT AND ALEX H. GRANT, OF GROVEPORT, OHIO.

## ATTACHMENT FOR BRICK-MACHINES.

No. 900,521.

Specification of Letters Patent.

Patented Oct. 6, 1908.

Application filed February 13, 1908. Serial No. 415,675.

To all whom it may concern:

Be it known that we, MILTON N. GRANT, a citizen of the United States, residing at Columbus, and Carlton J. Grant and Alex 5 H. Grant, citizens of the United States, residing at Groveport, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Attachments for Brick-Machines, of which the fol-

10 lowing is a specification.

Our invention relates to attachments for brick machines and the objects of our invention are to provide an improved attachment for brick machines, whereby the body of clay 15 discharged from the die may be shaped to produce brick of different form and at the same time imparting a roughened or corrugated surface to the brick; to produce means for readily adjusting the shaping device for 20 severing the body of clay at different angles and to produce certain improvements in details of construction which will be more fully pointed out hereinafter. These objects we accomplish in the manner illustrated in the 25 accompanying drawing, in which:

Figure 1 is a side elevation of the discharge end of a brick making machine showing our improved attachment in connection therewith, Fig. 2 is an end view of the same, 30 Fig. 3 is a detail view in perspective of one form of brick produced by our attachment, Fig. 4 is a similar view of a second form of brick adapted to be produced by said attachment, and, Fig. 5 is a detail view in perspec-35 tive of one of the clamps which we employ in detachably securing in place the cutting

wires.

Similar numerals refer to similar parts throughout the several views.

1 represents the discharge end of an ordinary brick machine and 2 represents the die which is secured to said discharge end in the usual manner and through which the clay body 3 is forced. As indicated in the draw-45 ing, the mouth of the die is of an oblong or

ordinary brick shape.

In constructing our attachment, we employ a ring or circular band 4, the latter having extending from its rear side suitably 50 formed arms 5 which are adapted to be bolted or otherwise secured to the usual head flange 1<sup>a</sup> of the brick machine, said flange being located at a point in rear of the discharge end of the machine.

6 and 7 represent wires or rods, the ends

of which are adapted to be detachably connected with the ring 4 at desirable points, said rods being thus made to intersect the circular space within the ring 4 and to cross in front of the mouth of the die 2 on such 60 lines as may be necessary for the severing of the clay body to produce the form of brick desired.

In Fig. 2 of the drawing, we have illustrated these wires as crossed in front of one 65 end of the die mouth, with the result that the side of the clay body which said wires intersect, will when said body is forced outward from the die have its upper and lower corners cut away, thus imparting to the clay 70 body an upper and lower side bevel and resulting when said clay body is cut into bricks, in producing the form of brick shown in Fig. 3 of the drawing. In producing a detachable connection of the ends of the wires or 75 rods 6 and 7 with the rings 4, we may employ clips, one of which is illustrated in detail in Fig. 5 of the drawing. The clip shown therein comprises a U-shaped member 8 adapted to embrace three sides of the ring 4 80 and a clip bar 9 connecting the parallel arms of the clip body 8 and being held in connection therewith by means of nuts 10 which are screwed on to the outer ends of said clip arms and by means of which the clip may be 85 clamped into connection with the ring.

With one side of each of the clips, we provide a projecting lug 11 having an opening therethrough for the reception of an end of one of the rods 6 or 7, said rod being adjust- 90 ably connected with said lug through the medium of a nut 12 engaging the threaded outer end of the rod. In order to change the position of either of the rods 6 or 7, with relation to the front of the die, it is obvious that the 95 nuts 10 may be loosened to permit the slipping of the clips to the desired point on the ring, in which new position the nuts may again be tightened. In making such change, it is evident that it may be necessary to em- 100 ploy rods of different lengths.

While we have shown but two forms of bricks adapted to be produced by our attachment, it is evident that the cutting rods may be so placed or secured in connection with 105 the ring to cut the clay body on other lines than those shown in the drawing, thus providing for the production of bricks having varying angular sides and ends.

It has been found that by the employment 110

of the rods such as 6 and 7 in the manner herein described, that not only a cutting or severing of the clay body is produced, but that in the contact of said rods with the clay 5 body, a roughened or corrugated surface is imparted to the clay, thus giving a desirable corrugated surface effect to the brick. In order to increase this roughening or corrugating action, if desired, we have provided an additional opening in each of the lugs 11 of the clips, said additional opening being on the outer side of the opening for the reception of the rod 6 or 7. With these additional lug openings may be connected the ends of addi-15 tional wires 6° and 7°, which additional wires following or being retained on the outer side of the wires or rods 6 and 7, will by contact with the cut surface of the clay body tend to wear the inner surface into ridges or cor-20 rugations, thus increasing the roughening effect.

What we claim, is:

1. In an attachment for brick machines, the combination with a brick machine and a 25 die supported in the discharge end thereof, of a ring supported in front of said die, and a rod adapted to have its ends adjustably and detachably connected with said ring.

2. In an attachment for brick machines, co the combination with a brick machine and a clay discharging and shaping die connected

with the discharge end of said machine, of a circular frame supported in front of the discharge end of said brick machine, clips adapted to be detachably and adjustably 35 connected with said frame, and rods intersecting said frame and held by said clips.

3. In an attachment for brick machines, the combination with a brick machine and a clay discharging and shaping die connected 40 with the discharge end of said machine, of a circular frame supported in front of the discharge end of said brick machine, clips adapted to be detachably and adjustably connected with said frame, and an outer and 45 inner rod intersecting said frame and having their ends connected with said clips.

4. The combination with a brick machine and its angular die, of a ring supported in front of and centered with relation to said 50 die, a plurality of members adapted to engage said ring at any point upon its periphery and a clay engaging member extending be-

tween said first named members.

In testimony whereof we affix our signa- 55 tures in presence of two witnesses.

> MILTON N. GRANT. CARLTON J. GRANT. ALEX H. GRANT.

Witnesses:

C. C. Shepherd,

L. Carl Stoughton.