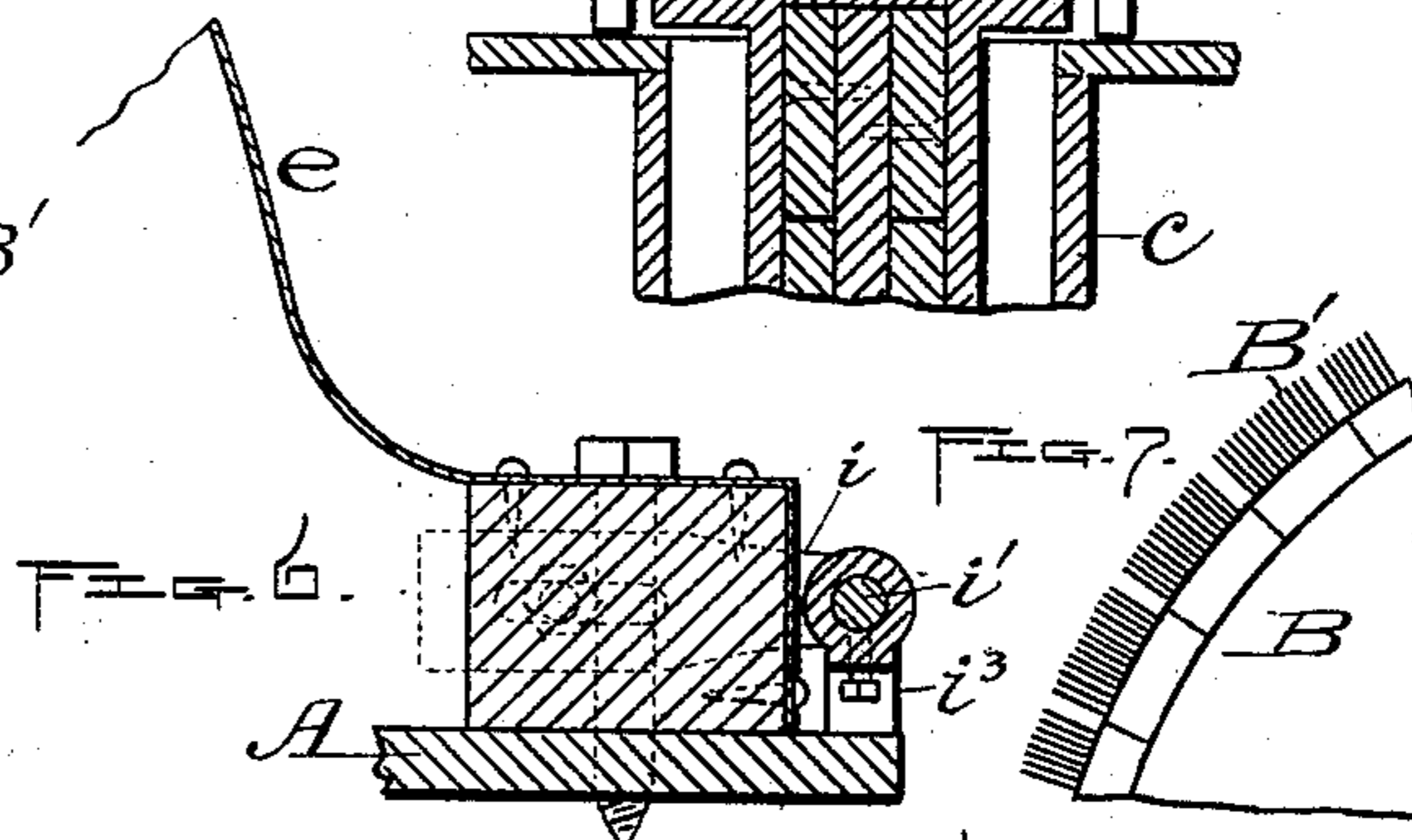
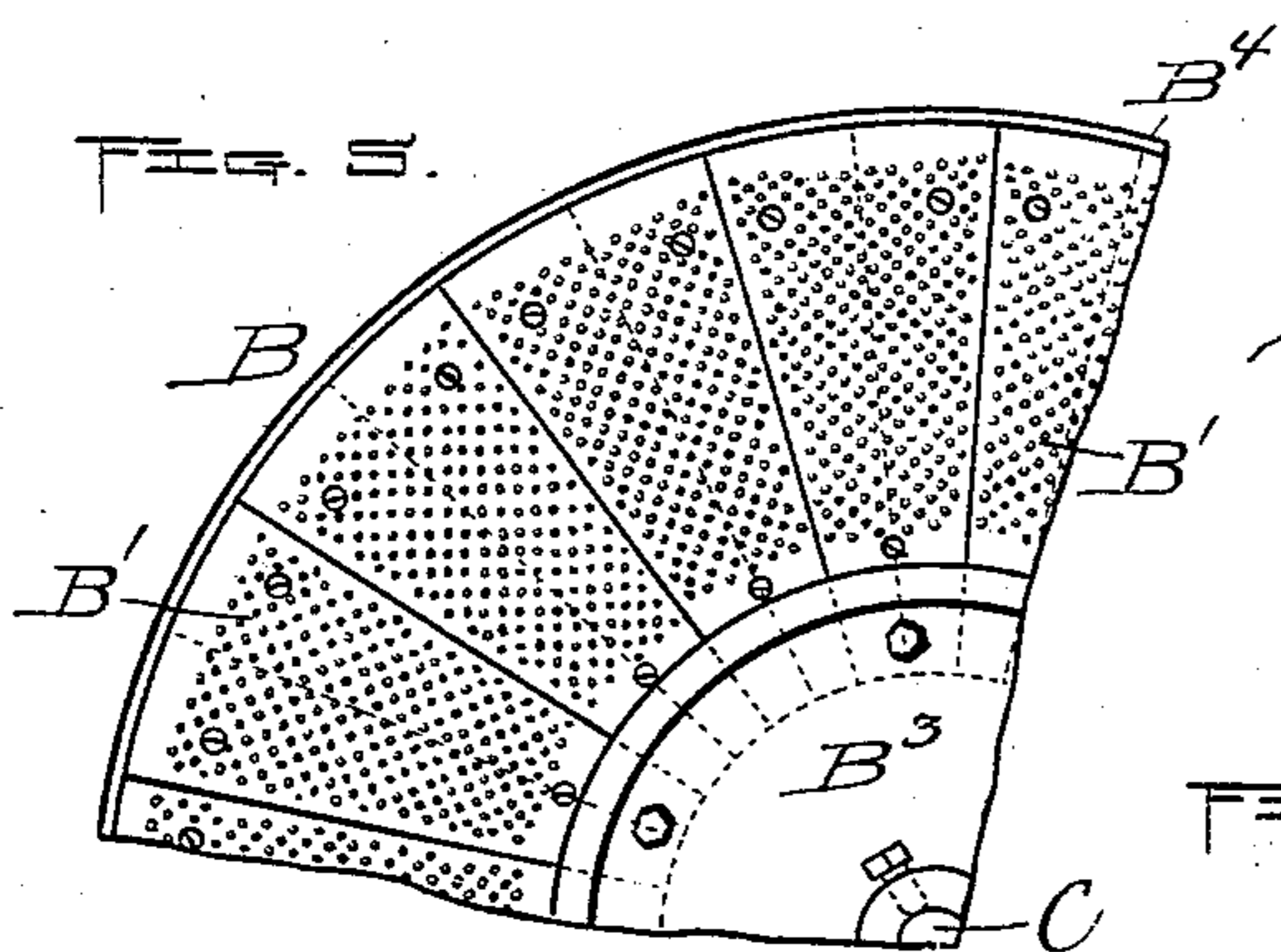
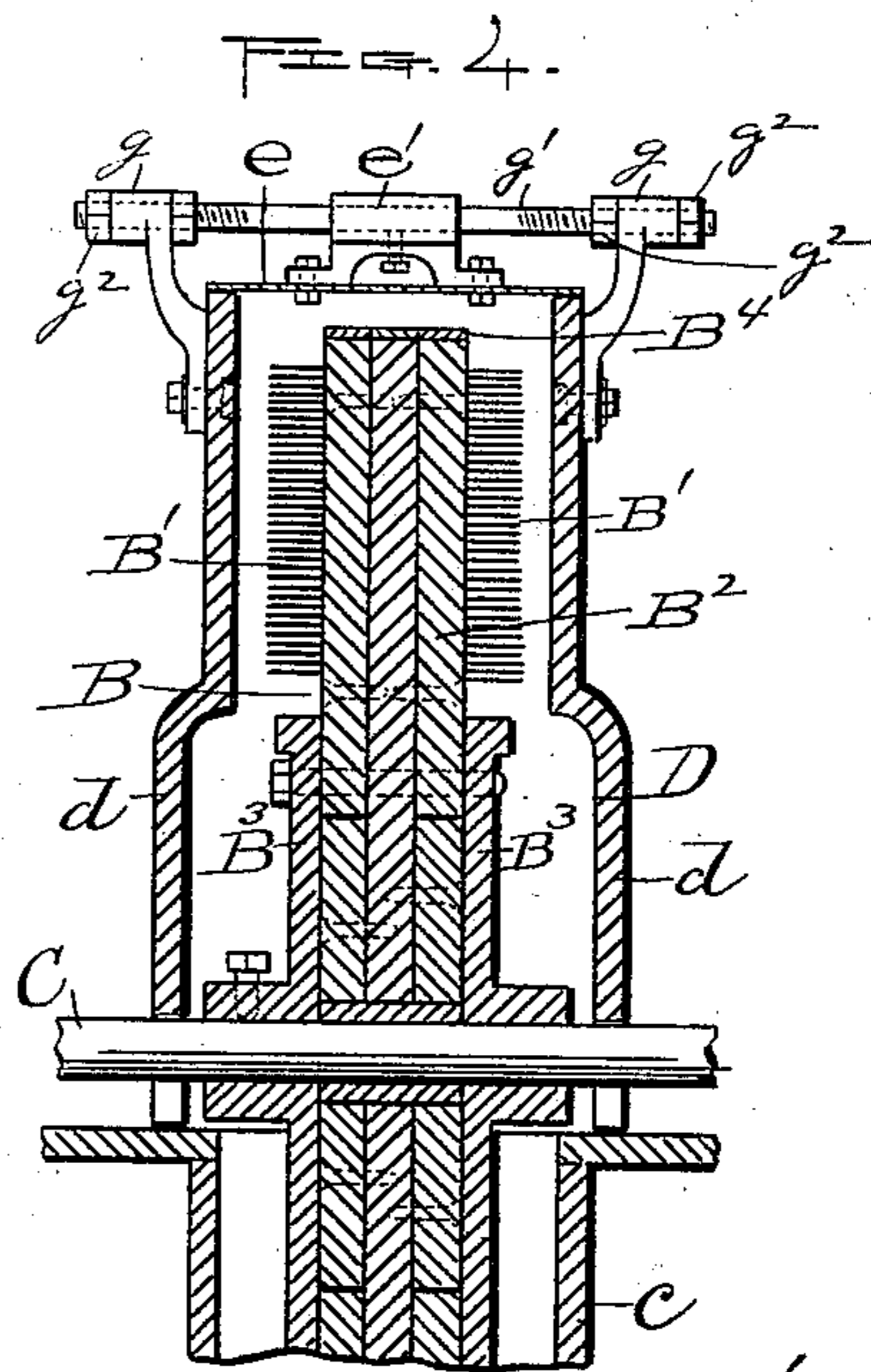
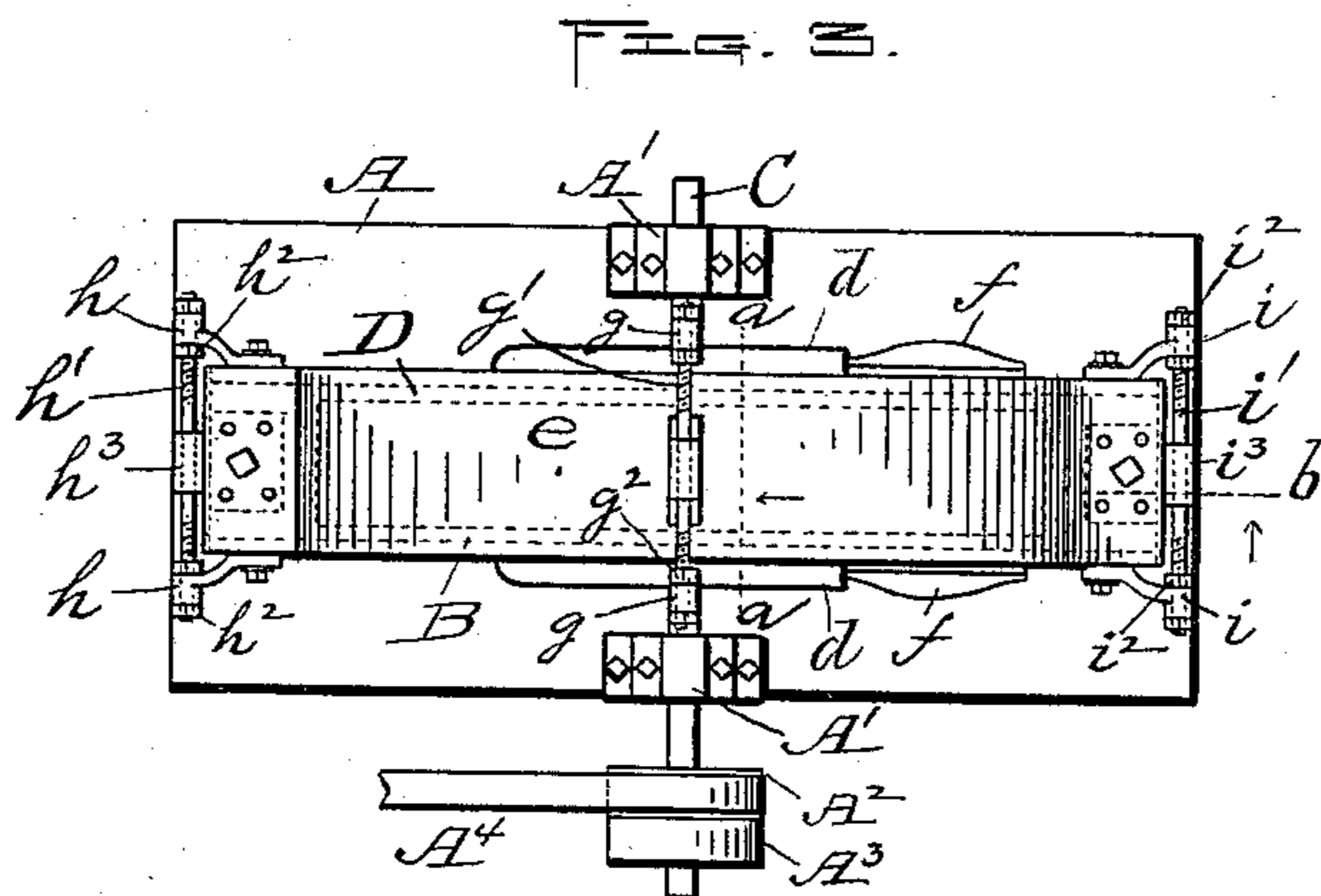
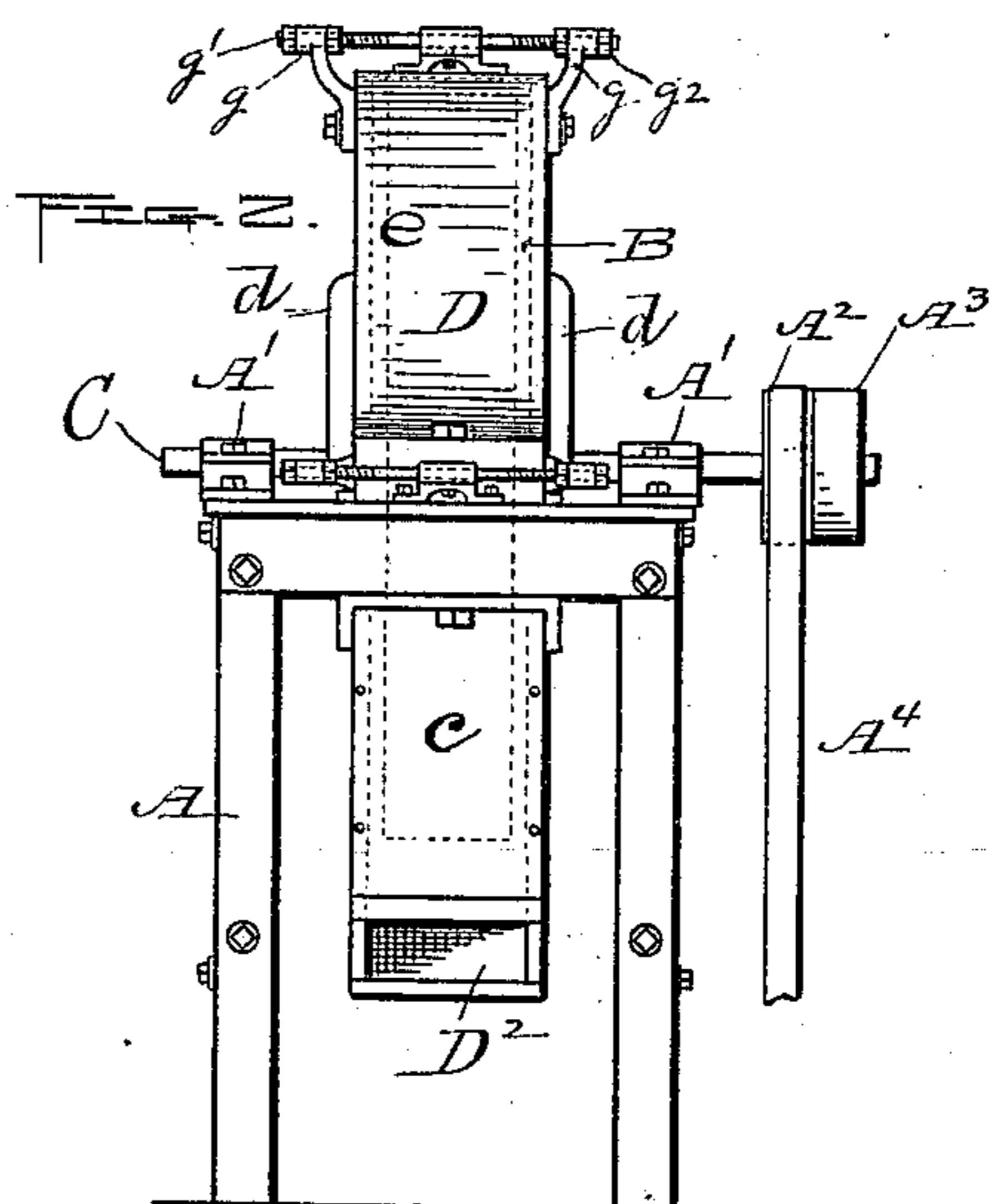
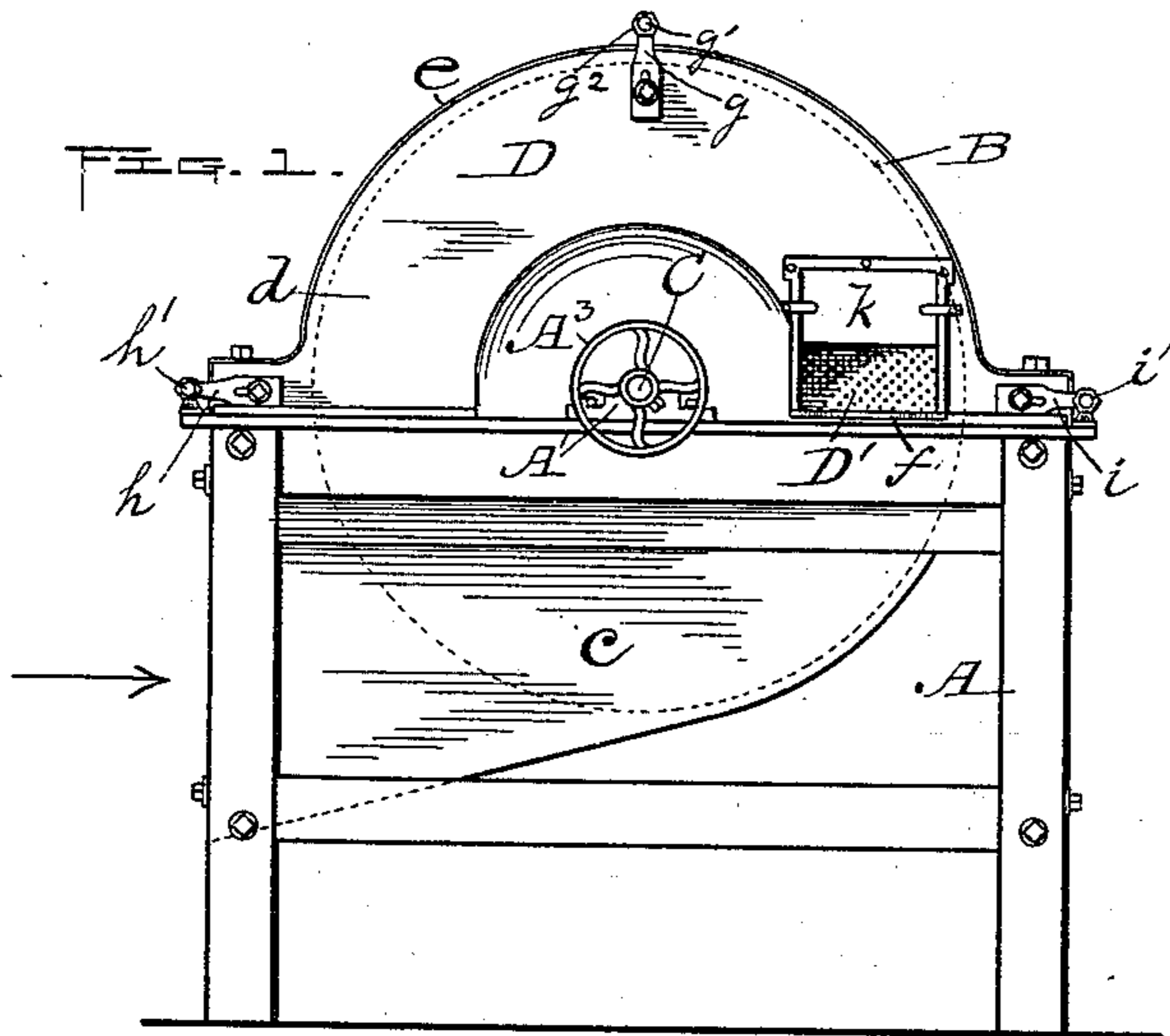


(No Model.)

S. A. PRESCOTT.
BRICK CLEANING MACHINE.

No. 601,676.

Patented Apr. 5, 1898.



WITNESSES;
Walter B. Nourse.
C. Forrest Wesson

INVENTOR:
Samuel A. Prescott.
By A. A. Barker, Att'y.

UNITED STATES PATENT OFFICE.

SAMUEL A. PRESCOTT, OF WILKINSONVILLE, MASSACHUSETTS.

BRICK-CLEANING MACHINE.

SPECIFICATION forming part of Letters Patent No. 601,676, dated April 5, 1898.

Application filed February 2, 1897. Serial No. 621,642. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL A. PRESCOTT, of Wilkesville, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Brick-Cleaning Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a side view of my said improved brick-cleaning machine. Fig. 2 is an end view thereof, looking in the direction of the arrow in Fig. 1. Fig. 3 is a top or plan view. Fig. 4 is a transverse section, upon an enlarged scale, taken at the point indicated by line *a a* in Fig. 3, all the following figures also being upon the same enlarged scale. Fig. 5 is a side view of part of the wheel against which the surfaces of the bricks are pressed to clean the old mortar therefrom, as will be hereinafter more fully explained. Fig. 6 is a longitudinal section of one end of the machine, taken on line *b*, Fig. 3; and Fig. 7 shows a modification in the construction, which will also be hereinafter described.

My invention relates to power-machines for cleaning the mortar from old bricks; and it consists of a rotary wheel mounted upon a suitable shaft and supporting-frame and having means for applying motive power to drive the same, also having a suitable case or covering with openings for the insertion of the bricks to be cleaned and for the discharge of the mortar removed therefrom, said wheel also being provided, preferably upon both sides, from its periphery for quite a distance in toward its axis, with laterally-projecting spurs or pins arranged at a short distance apart, against which the bricks are pressed to remove the mortar therefrom, as will be hereinafter more fully set forth.

In order that others may better understand the nature and purpose of my invention, I will now proceed to describe it more in detail.

In the drawings, A represents the supporting-framework, and B the rotary scraping-wheel, of the machine. Said wheel is arranged longitudinally, being mounted on a horizontal transverse shaft C, fitted to turn in suitable bearings A' A' on frame A and having mounted thereon tight and loose pul-

leys A² A³, which may be connected by a belt A⁴ with suitable driving mechanism. The wheel is provided, preferably upon both sides, with laterally-projecting metal pins B', arranged at a short distance apart and rigidly fastened in the same, in this instance the body B² of the wheel being made of wood and said pins driven therein. It is also in this instance provided with metal hub-plates B³ B³ and with a metal rim B⁴ to hold the various wooden sections thereof in place, as is shown in the drawings. The pins B' are designed to extend practically or nearly over the whole surface of each side of the wheel, from the rim to the hub thereof, as is shown in Figs. 4 and 5 of the drawings.

The wheel is inclosed within a suitable casing D, having an opening D' at each side above frame A for the insertion of the bricks to be cleaned, as hereinafter described, and also with an opening D² underneath, through which the mortar removed from the bricks in the cleaning operation may be discharged, the lower portion of the casing being inclined downward toward said opening D², as is shown in Figs. 1 and 2, to facilitate said discharging operation.

The casing D may be constructed in various ways. In this instance it consists of the bottom part *c* below the bed of frame A and rigidly fastened to said frame, the side plates *d d*, and top plate or cover *e* above said bed of the frame. Said top plate *e* forms a cap over the top edges of the side plates and the space between them and is rigidly fastened at the ends to suitable bearings on frame A, while the side plates *d d* are so arranged and fastened that they may each be moved a short distance laterally to either side independent of each other, the purpose thereof being to permit of the adjustment of the said side plates toward the face of the pins on wheel B as said pins become worn away shorter by use, the bricks during the cleaning operation being supported on a shelf or ledge *f*, formed on the side plates under their openings D', (see Figs. 1 and 3,) and therefore making said adjustment desirable in order to bring said support at the proper distance from the face of the scraping-pins in said cleaning operation. In this instance said side plates *d d* are made adjustable, as aforesaid, by sup-

porting the same on bearings $g g$, $h h$, and $i i$, (fastened thereto at the top and ends, respectively, as is shown in the drawings,) fitted to slide on stationary transverse rods or shafts g' , h' , and i' , said bearings being fastened on the rods or shafts after adjustment by means of the set-nuts $g^2 g^2$, $h^2 h^2$, and $i^2 i^2$, respectively. The rod or shaft g' is mounted in a bearing e' at the center of the top cap-plate e and the rods or shafts $h' i'$ in bearings $h^3 i^3$, respectively, on frame A.

If desired, the side openings D' may be varied in size vertically by making the openings in the side plates $d d$ larger than would customarily be used and employing a removable plate or cover k at the top of each opening, as is shown in Fig. 1, which may be removed when bricks of unusual width are to be cleaned.

The essential features of my invention, as will be observed, are the scraping-wheel, its supports, means whereby it may be turned and for inclosing said wheel, and as various ways of constructing the same may be adopted in practice to accomplish a like result I reserve the right to make such modifications therein as may be desirable and required by circumstances in constructing the machine.

To facilitate the operation of cleaning bricks, I prefer to make the machine double with an opening on each side and the wheel with scraping-pins on both sides, as hereinbefore described and shown, so that two men may work at the same time; but, if preferred, it may be made single to operate only from one side.

As will be observed by Fig. 5, that portion of wheel B to which the scraping-pins are secured is made of removable adjoining sections l around said wheel, so that if any part of the scraping-surface becomes injured or worn away it may be removed and new scraping-sections inserted in place thereof without necessitating the renewal of all the wheel.

In cleaning a brick it is inserted in one of the openings D' , resting on its shelf f , and its mortar-covered surface pressed by the attendant against the face of the pins secured in the rapidly-rotating wheel B, thereby scraping said mortar from the brick in a perfect and expeditious manner, leaving the surface of the brick practically as clean and smooth as when first made before being used. As each surface is thus cleaned it is removed, turned, and another surface applied to the scraping-surface until all the sides are cleaned, the mortar removed in said operations passing down and out of the machine through the discharge-opening D^2 onto the floor or ground or into a suitable receptacle (not shown) placed beneath said opening.

As will at once be apparent, the operation of cleaning old bricks by my aforesaid improved power-machine may be performed not only in a very easy and expeditious manner, but

with perfect results, the bricks thus cleaned being, as previously stated, practically as good as new, to be used again in brick construction. By said operation the great loss by breakage attendant on the usual process of cleaning bricks by hand is entirely removed.

Although I prefer to make the machine with the scraping-pins projecting from its sides, as hereinbefore described, the same may be applied to the periphery of said wheel, as is shown in Fig. 7, and thus used by a slight modification in the construction of the machine, without departing from the principle of my invention.

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

1. A machine for cleaning old bricks, consisting of frame A, bearings $A' A'$ secured thereto, horizontal transverse shaft C fitted to turn in said bearings and means for turning said shaft, in combination with wheel B mounted on said shaft, the pins B' projecting laterally from the sides of said wheel, and casing D having openings D' at the sides to admit the bricks to be cleaned, and an opening at the bottom through which the mortar scraped from the bricks may be discharged, substantially as set forth.

2. The combination of frame A, bearings $A' A'$ secured thereto, horizontal transverse shaft C fitted to turn in said bearings and means whereby said shaft may be turned, in combination with radial sections B^2 , a central disk to which they are fastened, the holding side plates $B^3 B^3$ and peripheral plate B^4 , the pins B' projecting laterally from the sides of the wheel, and casing D having openings D' at the sides to admit the bricks to be cleaned and an opening at the bottom through which the mortar scraped from the bricks may be discharged, substantially as set forth.

3. The combination of frame A, bearings $A' A'$ secured thereto, horizontal transverse shaft C fitted to turn in said bearings and means whereby said shaft may be turned, in combination with wheel B composed of radial sections B^2 a central disk to which they are fastened, the holding side plates $B^3 B^3$ and peripheral plate B^4 , the pins B' projecting laterally from the sides of the wheel, casing D having openings D' at the sides to admit the bricks to be cleaned and an opening underneath through which the mortar removed from the bricks may be discharged, and means for adjusting said casing consisting of suitable bearings secured to the stationary part of the casing and frame A as described, suitable threaded spindles turning in said bearings and bearings on the movable side plates of the casing, substantially as set forth.

SAMUEL A. PRESCOTT.

Witnesses:

A. A. BARKER,
W. B. NOURSE.