

R. SCHNECKENBURGER.
Packing for Rotary-Engines.

No. 223,175.

Patented Dec. 30, 1879.

Fig: 1.

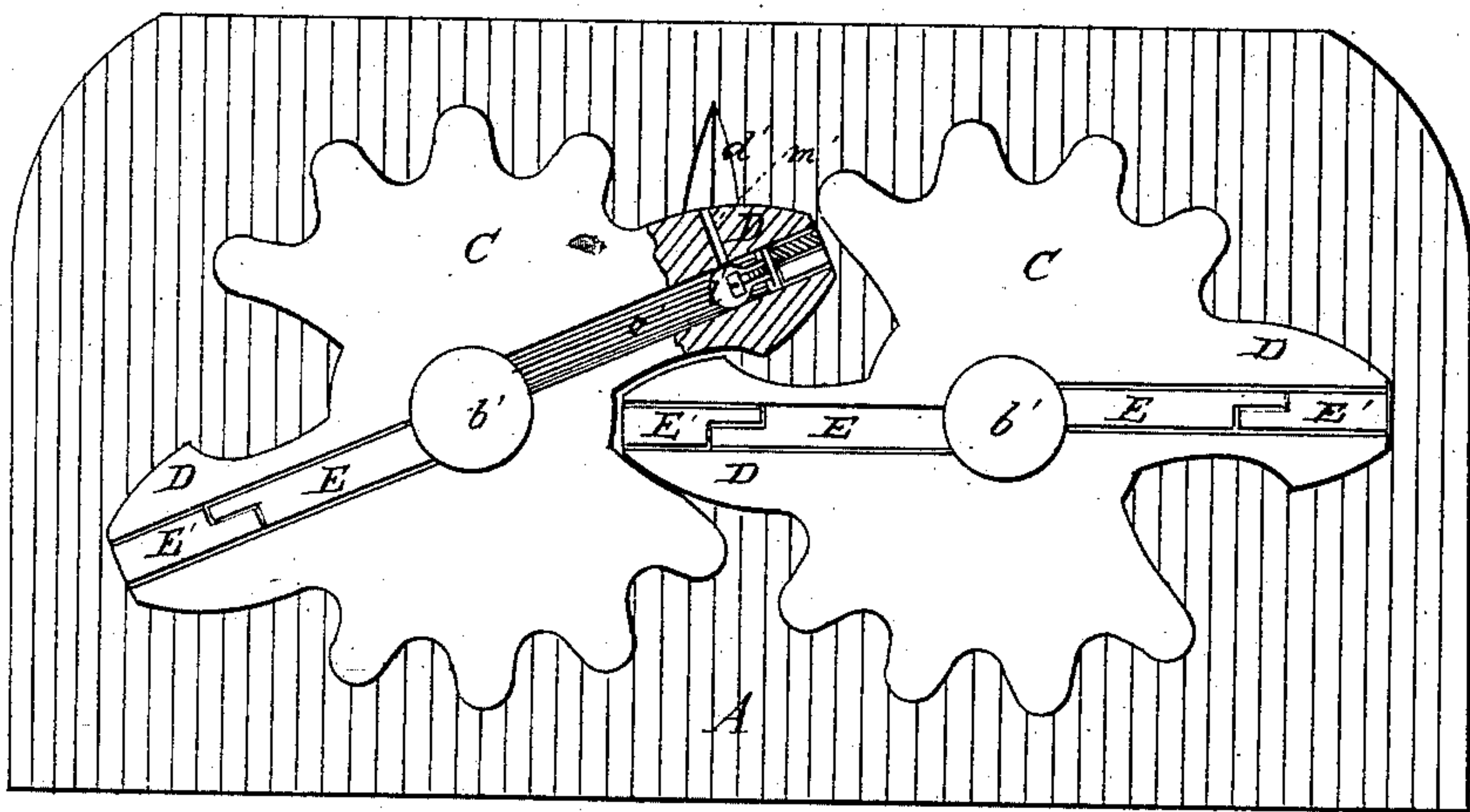


Fig: 2.

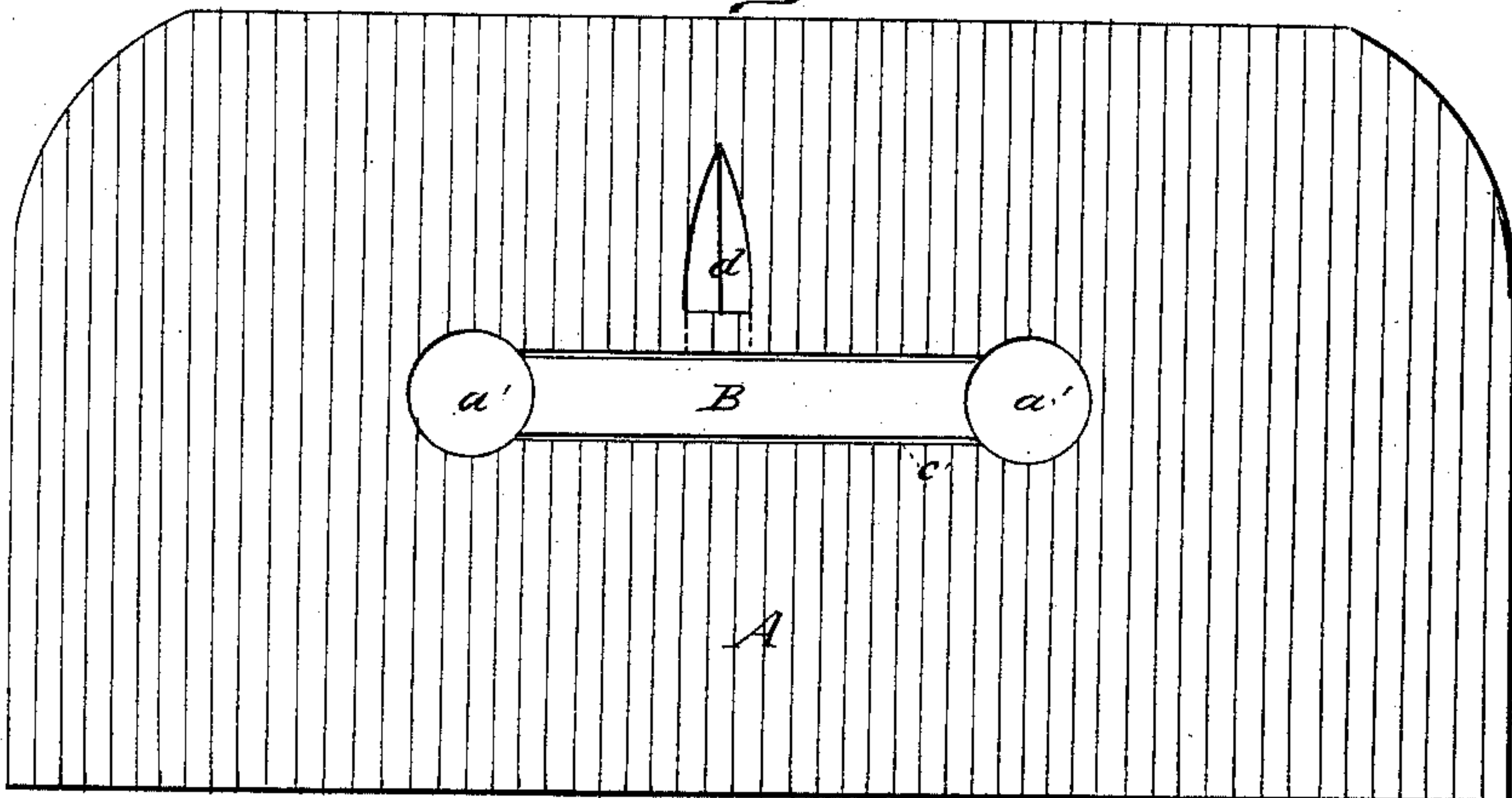


Fig: 3.

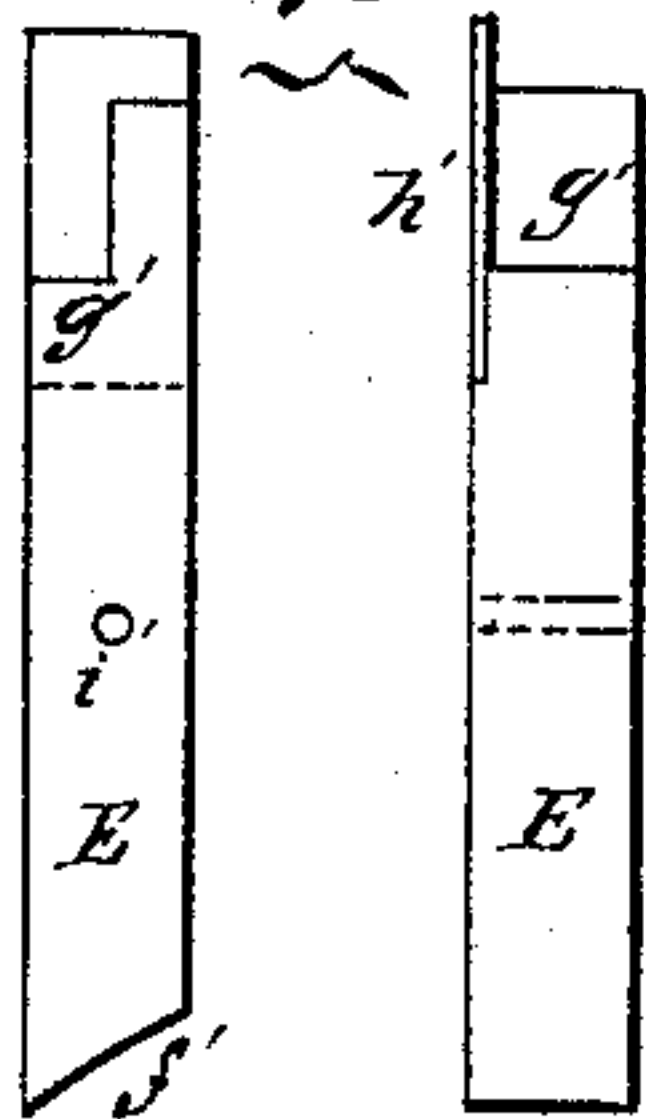


Fig: 4.

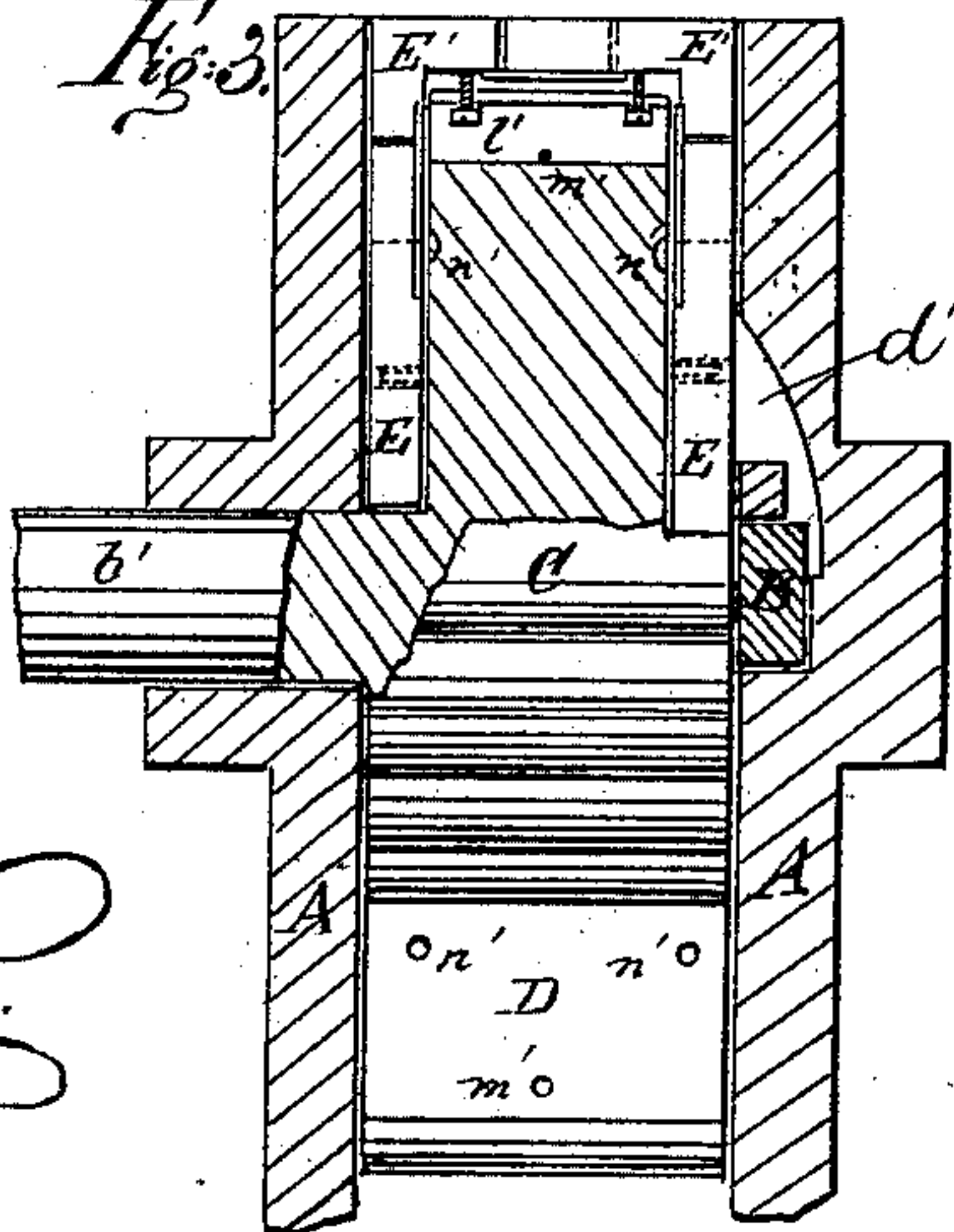
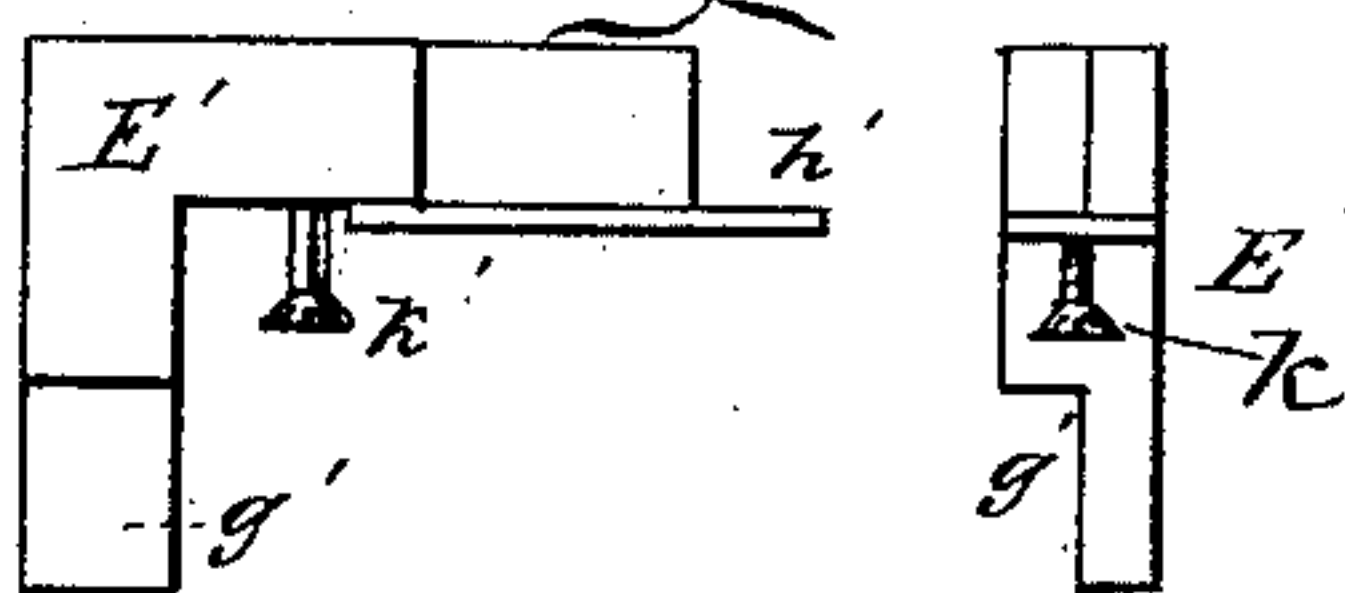


Fig: 5.



WITNESSES:

Chas. M. A. C.
C. Sedgwick

INVENTOR:

R. Schneckenburger
BY *M. H. C.*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

ROBERT SCHNECKENBURGER, OF JACKSON, MICHIGAN, ASSIGNOR TO
HIMSELF AND SARAH A. FROST, OF SAME PLACE.

IMPROVEMENT IN PACKING FOR ROTARY ENGINES.

Specification forming part of Letters Patent No. **223,175**, dated December 30, 1879; application filed
September 13, 1879.

To all whom it may concern:

Be it known that I, ROBERT SCHNECKENBURGER, of Jackson, in the county of Jackson and State of Michigan, have invented a new and Improved Packing for Rotary Engines, Pumps, &c., of which the following is a specification.

Figure 1 is an elevation, partly in section, of a portion of a cylinder, with one head removed to exhibit the packing fixed in the cams or pistons. Fig. 2 is an elevation of the inner face of a cylinder-head, showing the packing fixed to the head. Fig. 3 is an end elevation of a cam, partly in section, set within a cylinder. Fig. 4 represents elevations of the side packing-strips of the cams. Fig. 5 represents views of the peripheral packing-strips of the cams.

Similar letters of reference indicate corresponding parts.

The object of this invention is to provide an improved self-adjusting packing designed for rotary engines, rotary pumps, blowers, air-compressors, &c.

The invention consists in a rotary engine one of whose cylinder-heads has a steam-passage and apertures connected by a groove, in combination with a packing-strip, as herein-after described.

In the drawings, A A represent the cylinder-heads, provided with the apertures *a' a'* for the cam-shafts *b' b'*, and extending from one to the other of these apertures *a' a'* is a groove, *c'*, in which is fitted a packing-strip, B, which may be pressed outward against the ends of the cams C C when the engine is in operation by steam entering behind it (the strip B) through the hole or passage *d'*, that connects with the groove *c'*.

C C represent the revolving cams, provided with gibs or wings D D, that have side and peripheral or end grooves, *o'*, in which are set the metal packing-strips E E'. In the drawings four of these strips E E' are shown as making a complete packing around a gib or wing, D.

The side strips, E, are curved, as at *f'*, on one end, to fit snugly against the cam-shafts *b' b'*, while at the other end they are cut away, as at *g'*, to correspond and match with the lower ends of the strips E', and they (the strips E') are provided with a thin plate of metal, *h'*, that is pivoted on the inner face of the strip E, so that it (the plate *h'*) may be easily adjusted to cover the joint between the strips E and E'.

The strips E' are rectangular, and extend across the periphery, around the corners, and down the sides of the gibs D, to match with and into the strips E, making solid corner-packing, as shown. These strips E' match with and into each other, as they do with the strips E, and, like them, are provided with plates *h'*, for covering the inside of the joints made between them. These strips E are secured in the cam-grooves *o'* by headed studs *k'*, whose heads engage in the slot *l'*, shown in the periphery of the gib D.

In the face of the gib D are small perforations *m'* and *n'*, the former of which, *m'*, extends into the slot *l'*, while the latter, *n'*, extends into the side grooves, *o'*, of the gib D.

When the engine is in operation the steam propelling it enters these holes *m'* and *n'* and presses the packing-strips E and E' outward against the inner surface of the cylinder.

This style of packing is simple and durable, and is of especial advantage in rotary engines of all kinds, because of these characteristics and because of its presenting solid corners on the gibs.

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

In a rotary engine, the cylinder-head A, having steam-passage *d'*, and the apertures *a' a'*, connected by groove *c'*, in combination with a packing, B, as and for the purpose specified.

ROBERT SCHNECKENBURGER.

Witnesses:

E. K. DAUCHY,

E. A. CLEMENT.