

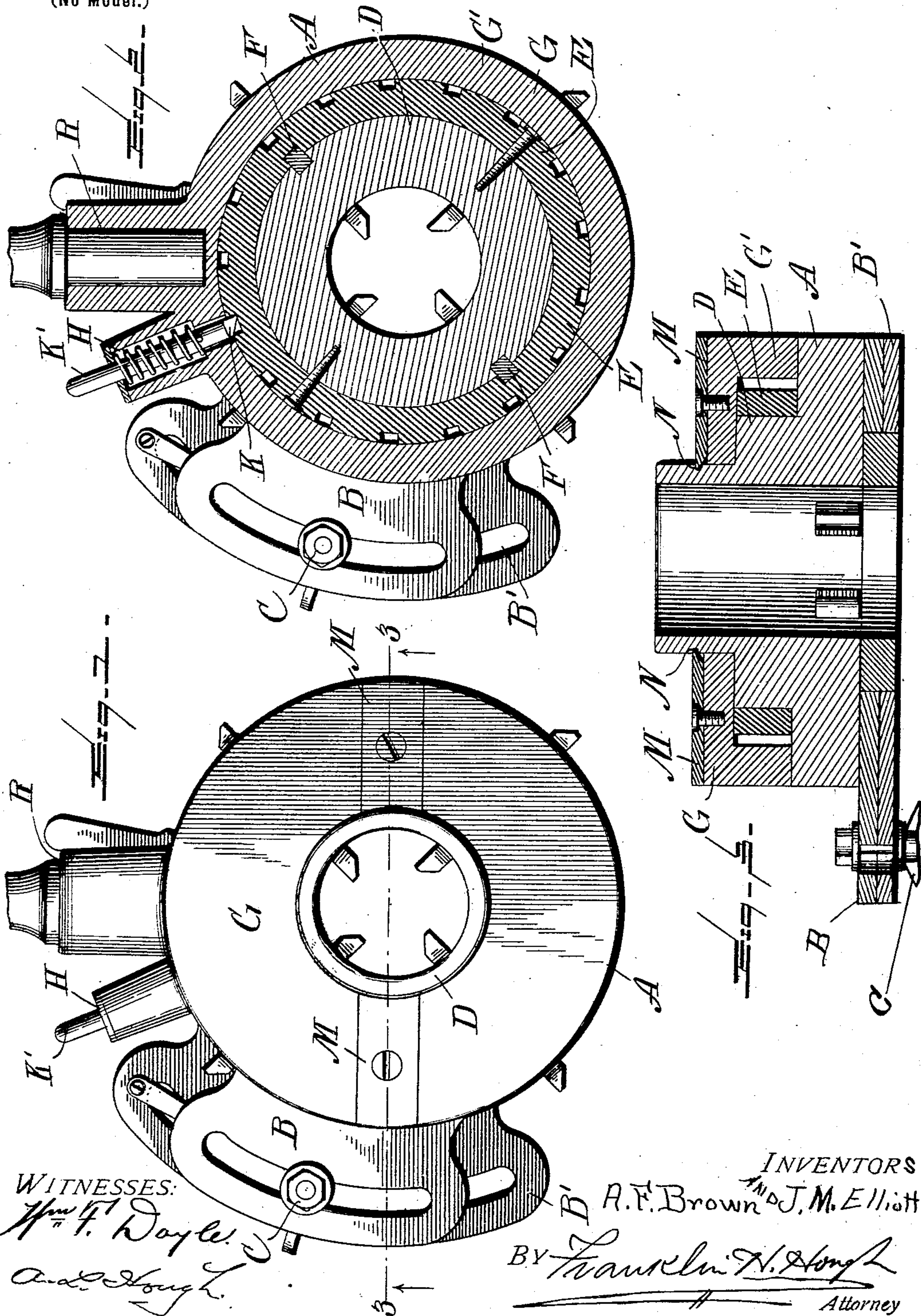
No. 684,184.

Patented Oct. 8, 1901.

A. F. BROWN & J. M. ELLIOTT.
THREAD CUTTING DIE.

(Application filed July 22, 1901.)

(No Model.)



WITNESSES:

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UNITED STATES PATENT OFFICE.

AMBROSE F. BROWN, OF LYNCH, WEST VIRGINIA, AND JAMES M. ELLIOTT,
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THREAD-CUTTING DIE.

SPECIFICATION forming part of Letters Patent No. 684,184, dated October 8, 1901.

Application filed July 22, 1901. Serial No. 69,299. (No model.)

To all whom it may concern:

Be it known that we, AMBROSE F. BROWN, residing at Lynch, in the county of Harrison and State of West Virginia, and JAMES M. ELLIOTT, residing at East Brady, Clarion county, Pennsylvania, citizens of the United States, have invented certain new and useful Improvements in Thread-Cutting Dies; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in apparatus for cutting threads on bolts, rods, &c.; and it consists, in connection with the cutting-die, which may be of any well-known construction, of a detachable ratchet-ring, which may be replaced when worn out.

The invention relates, further, to various details of construction and combination of parts, as will be hereinafter more fully described and then specifically defined in the appended claim.

Our invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this application, in which drawings similar letters of reference indicate like parts in the various views, and in which—

Figure 1 is a side elevation of our improved thread-cutting die. Fig. 2 is a sectional view through the die-cutter, parts being shown in elevation. Fig. 3 is a sectional view on line 3 3 of Fig. 1.

Reference now being had to the details of the drawings by letter, A designates the shell of the casing containing the adjustable dies, which are of the ordinary construction and adjusted by means of cam mechanism, as the disks B and B' are held in different positions with reference to each other by means of an adjusting-screw C. As we claim no novelty in the mechanism for adjusting the dies, we do not deem it necessary to further illustrate or describe these details.

Mounted on a shouldered portion of the shell D is a ratchet-ring E, which is held from rotation thereon by means of the keys F, which are seated in the circumference of said

shoulder and engage in recesses in the inner circumference of the ring. The outer face of the ring and the face of the shoulder are flush with each other. The cap G has a flange G' and is centrally apertured, said cap being adapted to fit over the shell and the ratchet-ring, with the end of the shell projecting through said aperture in the cap. In the aperture H in the flange of said cap is a spring-actuated pawl K, which is normally held in engagement with the teeth of said ratchet-ring, thus allowing the cap to turn in one direction independently of the shell, but the two designed to turn together in the opposite direction. On the circumference of said shell is a groove N, which is engaged by the keys M, which are seated in recesses in the outer face of said cap and diametrically opposite each other. The inner end of each key is concaved and is adapted to rest in said groove, thus allowing the cap to turn, but retaining same upon the shell. The cap is rotated by means of a lever, which is placed in the socket R on the circumference of the cap in the usual manner.

From the foregoing it will be observed that our thread-cutting die is manipulated in the usual manner, and when the ratchet-teeth become worn the ring may be removed and a new one substituted and the cap adjusted in place by the means described.

Having thus described our invention, what we claim to be new, and desire to secure by Letters Patent, is—

A thread-cutting device, comprising a shell D with adjustable disks and thread-cutting dies, said shell having two shoulders, a ratchet-ring E detachably held upon one of said shoulders, a flanged cap G resting on the two shoulders and centrally apertured to fit over the cylindrical central portion of said shell, two key-plates M seated in recesses in the face of said cap, and having their inner ends concaved, and adapted to engage in an annular groove in the circumference of the contracted cylindrical portion of said shell, as set forth.

In testimony whereof we hereunto affix our signatures in presence of two witnesses.

AMBROSE F. BROWN.
JAMES M. ELLIOTT.

Witnesses:

NAOMI F. LONG,
NANNIE LONG.