

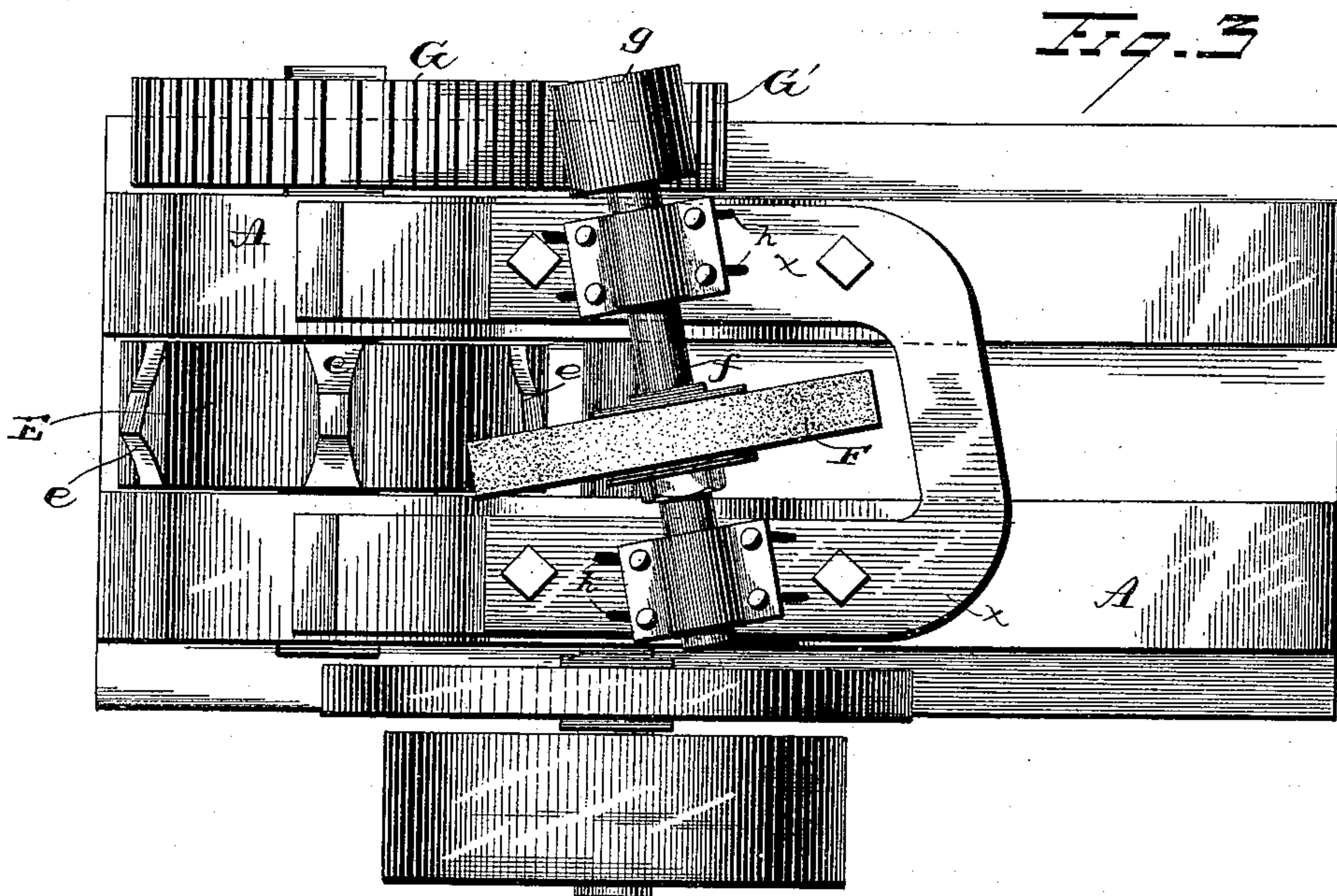
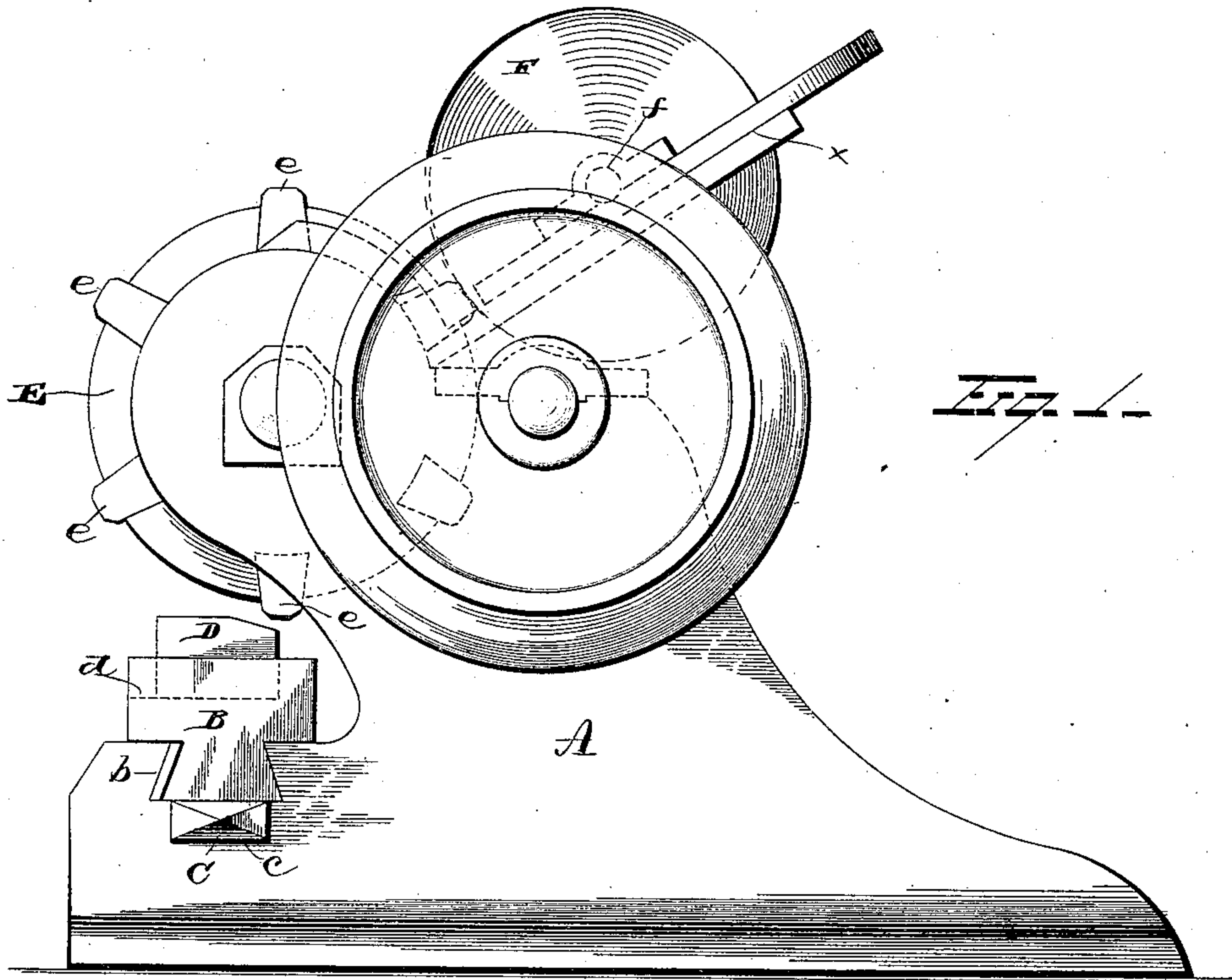
(No Model.)

2 Sheets—Sheet 1.

J. T. SPEER.
MACHINE FOR SWAGING BEVELS.

No. 330,520.

Patented Nov. 17, 1885.



WITNESSES
W. Nottingham
Geo. F. Downing

INVENTOR
Joe T. Speer.
By *Seagett & Seagett*,
Attorney

(No Model.)

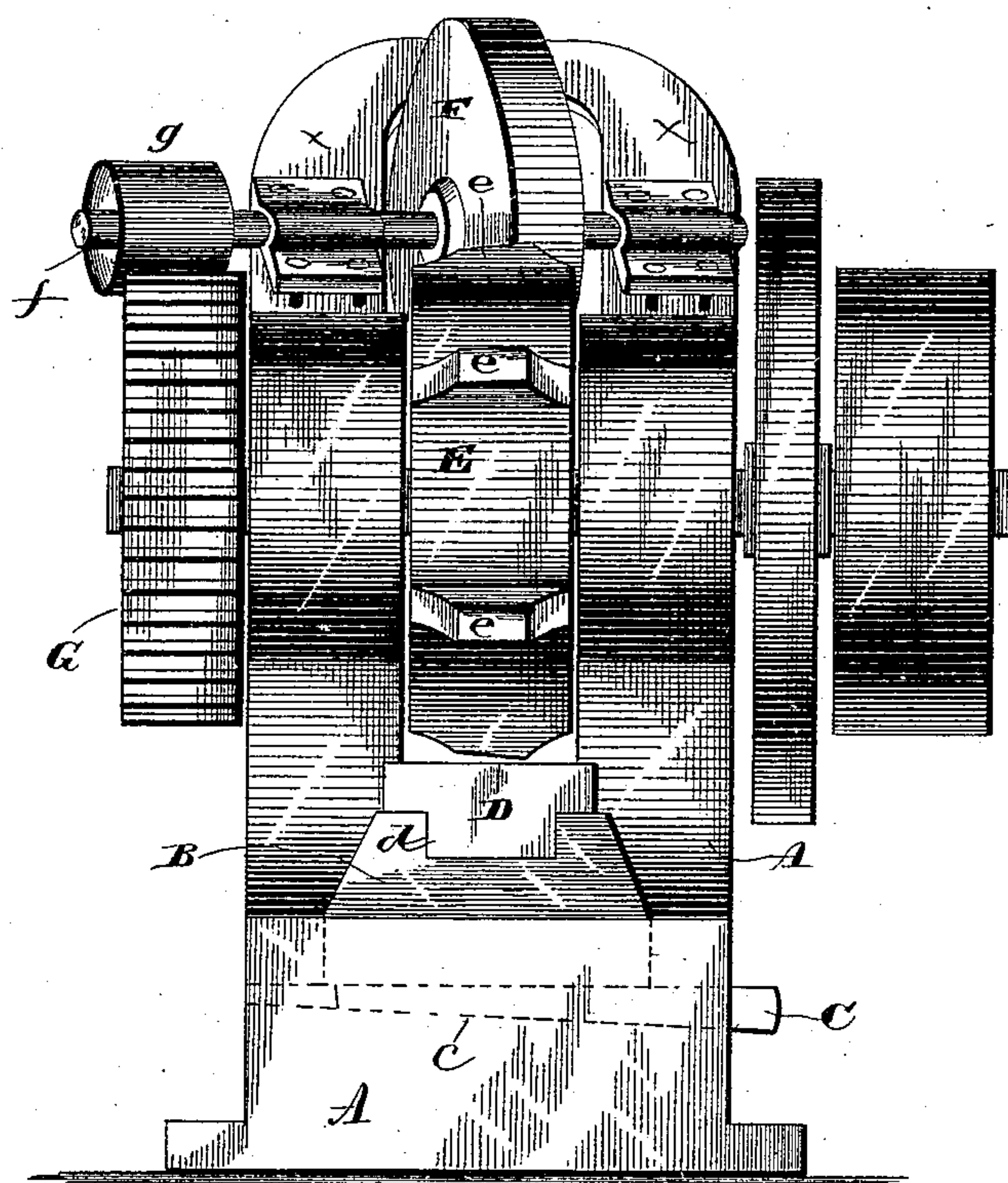
2 Sheets—Sheet 2.

J. T. SPEER.
MACHINE FOR SWAGING BEVELS.

No. 330,520.

Patented Nov. 17, 1885.

~~Fig. 2~~



WITNESSES

W. Nottingham
Geo. F. Downing

INVENTOR

Joa. T. Speer
By Seagrett & Seagrett
Attorney

UNITED STATES PATENT OFFICE.

JOE T. SPEER, OF PITTSBURG, PENNSYLVANIA.

MACHINE FOR SWAGING BEVELS.

SPECIFICATION forming part of Letters Patent No. 330,520, dated November 17, 1885.

Application filed September 23, 1885. Serial No. 177,907. (No model.)

To all whom it may concern:

Be it known that I, JOE T. SPEER, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Machines for Swaging Bevels; and I do hereby 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.

My invention relates to an improvement in machines for swaging bevels.

The object is to provide a machine of simple construction capable of swaging a bevel of any desired length or angle on any shaped piece of iron or steel.

With this end in view my invention consists in certain features of construction and combinations of parts, as will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view of the machine in side elevation. Fig. 2 is a front view, and Fig. 3 is a plan view.

A represents the base or support for the lower die, the roll, and the gear for running and truing the upper dies. The die-block B is set in a recess, *b*, formed in the front portion of the support, and is adapted to be elevated or lowered by means of a wedge, C, which is inserted transversely to the support A, and resting on an inclined seat, *c*. The upper face of the block B is provided with a channel or recess, *d*, extending lengthwise of the base A, in which channel or recess the lower die, D, is adapted to rest and have a sliding adjustment. Journaled in the support A, above the die D, is the roller E, provided on its face with recesses or sockets adapted to receive and retain the upper dies, *e*, in the proper positions to engage the piece of iron or steel to be laid on the die D. The faces of the dies *e* are beveled in the direction of the axis of the roller E, or they may be made parallel with the roller, for the purpose of gradually reducing the piece operated upon.

F represents an emery-wheel or other form of grinding-wheel, secured on a shaft, *f*, the latter having the same general direction as the beveled face of the die *e* nearest thereto, thus placing the face of the emery-wheel squarely against the beveled face of each of the dies *e* as they are brought in succession to

the face of the said emery-wheel by the rotation of the roller. The emery-wheel F is journaled in bearings which are capable of adjustment in a direction transversely to the shaft, either by bolts working in elongated slots *h* or other ordinary devices, by means of which the face of the emery-wheel may be set at different angles to the faces of the dies *e*, and thereby cut them down to different angles of bevel. The wheel F is also capable of adjustment in the direction of the axis either by a sliding frame, *x*, or other approved means for the purpose of running it across the faces of the dies *e*. By means of the emery-wheel the faces of the dies are kept squared up in a condition to form a true bevel on the piece resting upon the lower die, upon which they successively act. The emery-wheel F is conveniently driven by means of a friction or band pulley, *g*, in engagement with a friction drive-wheel or connected with a drive band-pulley. (Not shown.) The main shaft is driven by the engine or other power through suitable transmitting mechanism, and by means of suitable gears, G G', imparts motion to the roller E.

By moving the die D, with the piece to be beveled resting thereon, forwardly and backwardly beneath the dies *e*, by elevating the die D by the wedge beneath the die-block B, and by keeping the faces of the dies *e* the desired bevel and true, the work may be reduced to an edge by a gradual elongation with great exactness and any desired angle of bevel, no matter what the shape of the work to be beveled may be.

It is evident that slight changes might be resorted to in the form and arrangement of the several parts described without departing from the spirit and scope of my invention; hence I do not wish to limit myself strictly to the construction herein set forth; but,

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

1. The combination, with a vertically-adjustable lower die, of a series of bevel-faced dies rigidly secured in the rim of a roller, and adapted to engage work laid on the lower anvil and reduce the same to an edge by gradual elongation, substantially as set forth.

2. The combination, with a vertically and horizontally adjustable lower die, of a series

of bevel-faced upper dies secured in the face of a roller, and adapted to engage successively a piece of work resting on the lower die, substantially as set forth.

5 3. The combination, with a lower die and an upper die secured in the face of a roller, of a grinding-wheel adapted to engage the face of the upper die as the roller revolves, and thereby keep the face true, substantially as
10 set forth.

4. The combination, with a lower die and a series of dies secured in the face of a roller, of an emery-wheel adapted to form a true bevel on the faces of the several dies, sub-
15 stantially as set forth.

5. The combination, with a lower die and a series of dies secured in the face of a roller, of

an emery-wheel journaled in longitudinal adjustment in bearings having a lateral adjustment, for the purpose substantially as set forth. 20

6. The combination, with the die-block adapted to be vertically adjusted by a wedge, and the lower die having a horizontal adjustment in the die-block, of a series of upper dies secured to the face of a roller, and a wheel 25 adapted to grind the faces of the upper dies, for the purpose substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

JOE T. SPEER.

Witnesses:

CHAS. E. BROWN,
J. M. ANDERSON.