(No Model.)

I. HIRSCH.

DIE AND MACHINE FOR ROLLING CUTLERY.

No. 475,315. Patented May 24, 1892.

Fig. 2.

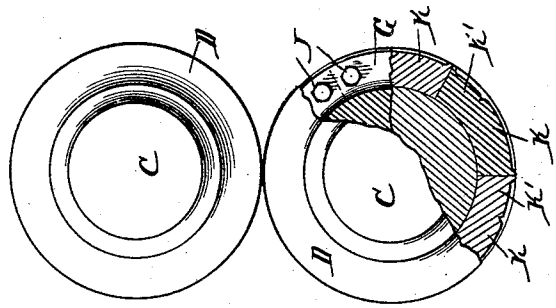
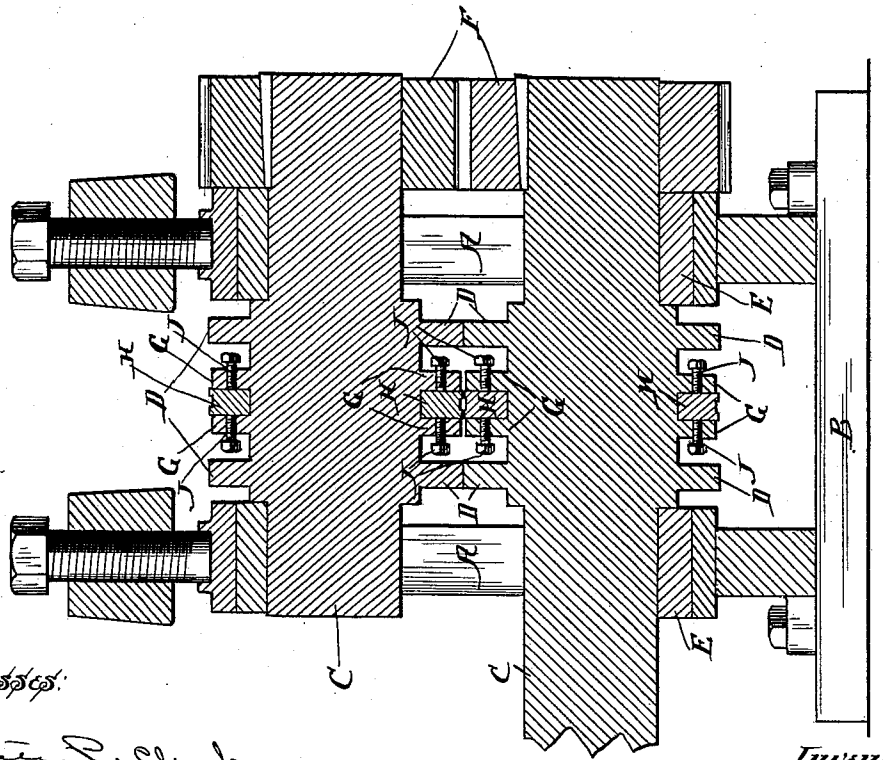


Fig. 1.



Witnesses:

Celeste P. Chapman.

Harriet M. Hay.

Inventor:

Isaac Hirsch.

by Francis W. Parker,

Attorney.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

ISAAC HIRSCH, OF CHICAGO, ILLINOIS.

DIE AND MACHINE FOR ROLLING CUTLERY.

SPECIFICATION forming part of Letters Patent No. 475,315, dated May 24, 1892.

Application filed June 8, 1891. Serial No. 395,450. (No model.)

To all whom it may concern:

Be it known that I, ISAAC HIRSCH, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Dies and Machines for Rolling Cutlery, of which the following is a full, clear, and exact specification.

My invention relates to dies and machines for rolling cutlery and the like, and has for its object to provide means for conveniently introducing, removing, and adjusting the dies, and means for suitably mounting the rolls.

It is illustrated in the accompanying drawings, wherein—

Figure 1 is a cross-section through the machine. Fig. 2 is a detail view of the rolls with parts broken away to show the dies.

Like parts are indicated by the same letters in both figures.

A A are the side supporting portions of the frame, and B the base.

C C are the rolls, provided with the bearing-flanges D D, which engage each other, and whereby the upper roll is supported upon the lower.

E E are the boxes, upon which the lower roll is journaled.

F are the intermeshing gears, whereby the two rolls are made to travel together.

G G are die-flanges upon both rolls, of a slightly less radius than the bearing-flanges D D.

H H are dies placed between the die-flanges and adjustably held in position by the set-screws J J, which bear upon opposite sides of the die, though of course but a single set of screws could be used, and the dies could thus be made to firmly set against or to bear against one of the die-flanges. The die will be composed of sections, and in the case of cutlery where one portion of the article is of a certain thickness when finished and the adjacent portion is of a different thickness it is desirable to make the dies in sections K′ K′—as, for example, in the case of dies for making knives, where the portion to form the handle is marked K′ in the drawings and that portion forming the blade is marked K. The dies are themselves set so that their projecting portions are almost the same radial distance at a point from the center of the roll C as is the circumference of the flanges D D.

The use and operation of my device are as follows: I have not dwelt upon the details of the mounting of the rolls or their operation, but have set out fully such portions of the device as concern the present invention. It will be observed that the rolls engage each other upon the circumference of the flanges D D, and thus they are brought in contact, rolling one upon the other in an approximately noiseless manner. The dies, however, are slightly sunk within the circumference of these flanges, so that when the machine is not in use, but the rolls rotating, it is also practically noiseless. The dies may be set against either side or secured otherwise by means of the set-screws J J. By making the dies themselves in sections the portion which most speedily wears out may be removed and another replaced—as, for example, that portion of the die by which the blade is stamped out or drawn out. The dies themselves may be removed from time to time and dies of other forms be inserted. Any one die of a series or set which has become damaged or worn may be replaced by a perfect die. The rolls may be driven in any convenient manner.

I claim—

1. In a machine for rolling cutlery and the like, the combination of two rolls with outer bearing-flanges which are in contact with each other, inner flanges of slightly less diameter than the bearing-flanges, and removable sectional dies secured between the inner flanges and projecting slightly from them.

2. In a machine for rolling cutlery and the like, the combination of two rolls with outer bearing-flanges which are in contact with each other, inner flanges of slightly less diameter than the bearing-flanges, removable sectional dies secured between the inner flanges and projecting slightly from them, and a series of set-screws threaded into and passing through the inner flanges, whereby the sections of the dies are each independently and adjustably secured between the inner flanges.

ISAAC HIRSCH.

Witnesses:
CELESTE P. CHAPMAN,
H. M. DAY.