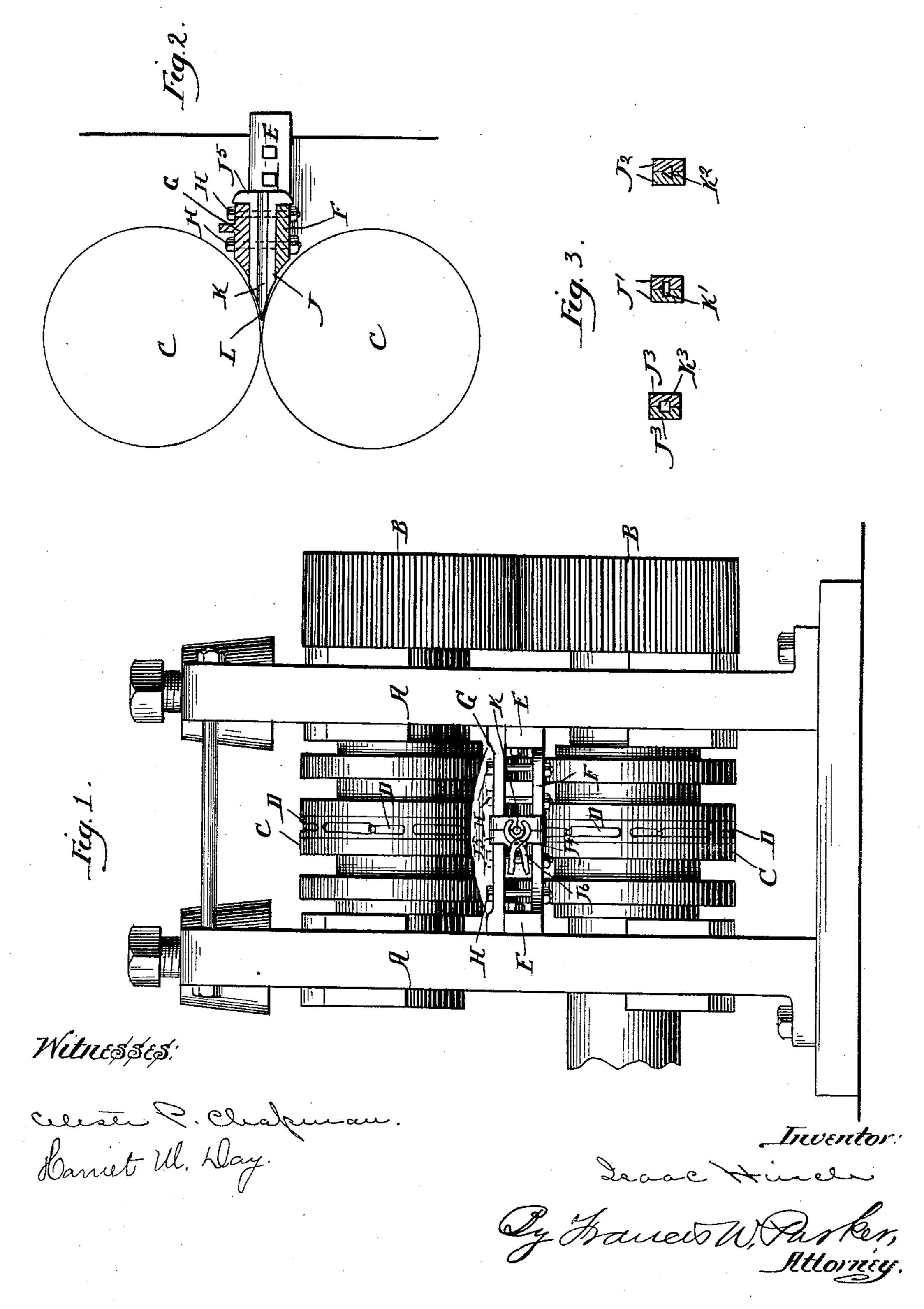
## I. HIRSCH.

## ROLLING MACHINE FOR CUTLERY.

No. 480,325.

Patented Aug. 9, 1892.



## United States Patent Office.

ISAAC HIRSCH, OF CHICAGO, ILLINOIS.

## ROLLING-MACHINE FOR CUTLERY.

SPECIFICATION forming part of Letters Patent No. 480,325, dated August 9, 1892.

Application filed June 8, 1891. Serial No. 395,449. (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 Rolling-Machines for Cutlery, of which the following is a full, clear, and exact specification.

My invention relates to rolling-machines to for the manufacture of cutlery, and has for its object to provide means for properly guiding or directing the metal used into the rolls, and also for clearing the same from scale.

It is illustrated in the accompanying draw-

15 ings, wherein—

Figure 1 is a front view of the machine containing my improvements. Fig. 2 is a cross-section through the guide portion proper. Fig. 3 represents detailed cross-sections through guide-bars showing modifications in form.

Like parts are indicated by the same letters

in all the figures.

A A are the side supports of the roll; B B, the gears which cause the two rolls to travel together.

C C are the rolls containing or carrying suitable dies D D.

E E are bars secured to the sides of the sup-30 ports A A, so as to form ledges, and connected below by the flat plate F.

G is a somewhat similar flat plate resting

upon the ledge-bars E E.

H H are bolts, which pass through the two 35 bars and are adapted to clamp, when the nuts are turned up, the two bars or plates together.

slot K, and J' J² J³ are modifications of these bars, containing each, respectively, a slot K'

40 K² K³. Each of these bars is preferably formed with the head J⁵, which limits the approach of the guide-bars to the rolls. The guide-bars are drawn down, each to a point or edge, as indicated at L, so as to be inserted within the rolls and in close proximity there to. One of these guide-bars is provided with a lug J⁴, projecting from its head J⁵, and to this lug is pivoted the scale-tongs J⁶, which are constructed at their jaws so as when

clamped to conform in outline to the rod or 50 bar of metal passing through them. They may be clamped together by hand in the ordinary way or could of course be brought together automatically, if desired. The tongs thus correspond to the bars. The bars are evi- 55 dently removable, for by loosening the bolts H H the upper plate G is loosened and the bars may be slipped out. Thus they carry with them their tongs, and a new set of bars may be slipped into place, properly positioned, 60 and then clamped as before. Thus removable, adjustable, and varying bars may be applied to correspond to the metal employed or to the construction of the dies attached to the rolls.

The use and operation of my invention are as follows: The material used is bars, either flat, round, square, triangular, or oval in crosssection or the like, and may be employed for the manufacture of cutlery and other such 70 articles. The dies for stamping or drawing out the cutlery are disposed about the rolls, as indicated in Fig. 1. These dies are of course preferably removable, so that the same rolls and the same machine may be used for 75 stamping various kinds of cutlery. The suitable guide-bars, as required to accommodate the proposed metal, are inserted, as indicated in Figs. 1 and 2, between the bars or plates F and G and brought to the right position in 80 close contact with each other. The bolts H H are then tightly set, so as to securely clamp the two guide-bars together and in the position shown in Fig. 2. These guide-bars can of course be moved and positioned so as to de-85 liver the bar of metal directly to the rolls at any desired angle in the horizontal plane, if this were necessary, incident to the peculiar kind of dies employed for any specific purpose. The tongs are employed when the rod 90 has been pushed through the guide far enough to be engaged by the rolls, and the tongs are tightly clamped about the rod, so as to clean and scrape the same, the scale and the like being removed thereby. The rolls draw the 95 rods of metal through, thus causing them to be clamped by the tongs. The guides may

the very point where the dies begin to approach it. The guides are of considerable length, so as to firmly hold the rod and deliver it in an unyielding manner to the rolls. I claim—

In rolls for making cutlery and the like, the combination of two engaging die-carrying rolls, with a guide to deliver the metal thereto, and cleaning tongs or clamps adapted to

entirely surround the rod and engage the ro same at the point of its entry into the guide, so that the rod is scraped and cleaned by the action of the rolls pulling it through the guide.

ISAAC HIRSCH.

Witnesses:

CELESTE P. CHAPMAN, H. M. DAY.