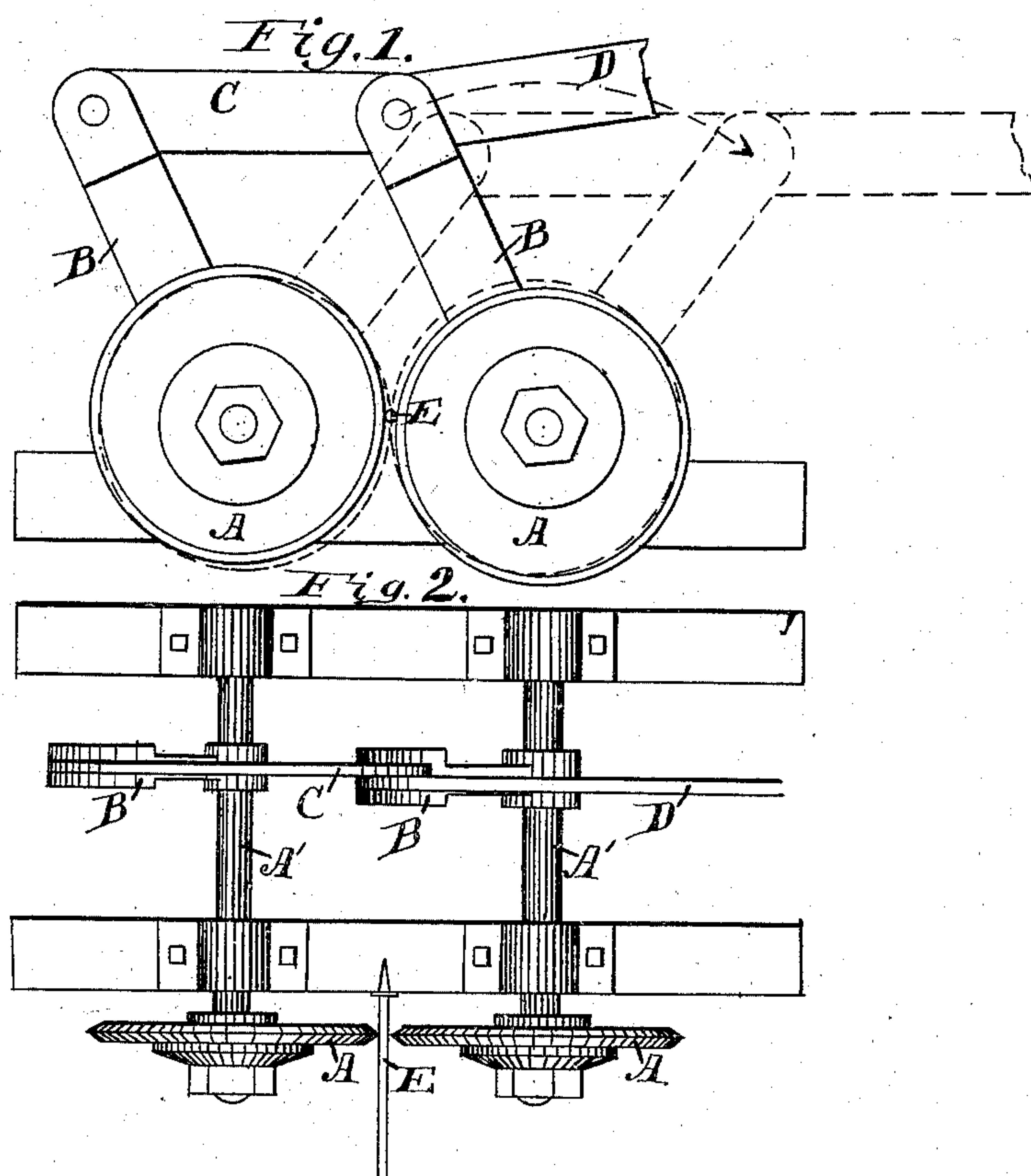


(No Model.)

D. HOUGHTON.  
WIRE CUTTING MACHINE.

No. 335,818.

Patented Feb. 9, 1886.



Witnesses:

Willis McDowell  
E. A. Mitchell

Inventor:

Darius Houghton  
by S. M. Bates  
his atty.

# UNITED STATES PATENT OFFICE.

DARIUS HOUGHTON, OF SKOWHEGAN, MAINE.

## WIRE-CUTTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 335,818, dated February 9, 1886.

Application filed August 3, 1885. Serial No. 173,410. (No model.)

*To all whom it may concern:*

Be it known that I, DARIUS HOUGHTON, a citizen of the United States, residing at Skowhegan, in the county of Somerset and State of Maine, have invented certain new and useful Improvements in Wire-Cutting Machines, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to machines for cutting off wire into pieces of any length, and it is designed more particularly to be used in the manufacture of boot-calks, where the calk is forged on the end of a steel wire and then cut off at the proper point.

It consists of two eccentric cutters with their edges in line, and such a distance apart that when they revolve a certain amount their edges will come together, cutting the wire which is placed between them.

In the drawings, Figure 1 is a side elevation. Fig. 2 is a plan.

A A are two eccentric cutters hung on the shafts or arbors A' A'. These cutters A A have their cutting-edges exactly in line with each other, and they are so hung that when they are revolved around to a certain point their edges will come together. The levers B B are attached to the shafts A' A', and the upper ends of these levers are joined by a connecting-rod, C. The sweep D is connected to one of the levers B at one end, while its other end is attached to a crank or an eccentric.

The crank or eccentric acting on the end of the sweep D imparts a vibrating or reciprocal motion to the levers B B, as indicated by dotted lines in Fig. 1. When the levers B are in the position shown by full lines in Fig. 1, they

are at one end of the stroke, at which time the cutters are at their greatest distance apart. The wire E, which is to be cut, is now placed between the cutters. As levers B move to position of dotted lines the edges of the cutters which come against opposite sides of wire E move in opposite directions and at the same time approach each other until they meet, thus rolling and cutting off the wire and leaving a smoothly-pointed end.

It will be seen that the revolving motion of the cutters A A might be produced in a variety of other ways than by the use of the levers B, as here shown, and therefore I do not wish to confine myself to the use of these levers. Again, these cutters, by being made to revolve in the same direction and with the same speed, would act as cutters, precisely as here shown, coming together at regular intervals, owing to their eccentric form.

I claim—

1. In a wire-cutting machine, the combination of the two eccentric cutters A A, hung on arbors A' A', their cutting-edges in line with each other, and so adjusted that when revolved in the same direction their edges will come together and separate at regular intervals, substantially as shown.

2. In a wire-cutting machine, the eccentric cutters A A, hung on arbors A' A', the levers B B, connecting-rod C, and sweep D, all combined, substantially as set forth and described.

In testimony whereof I affix my signature in presence of two witnesses.

DARIUS HOUGHTON.

Witnesses:

HENRY C. SEARLE,  
NATHAN G. ORDWAY.