

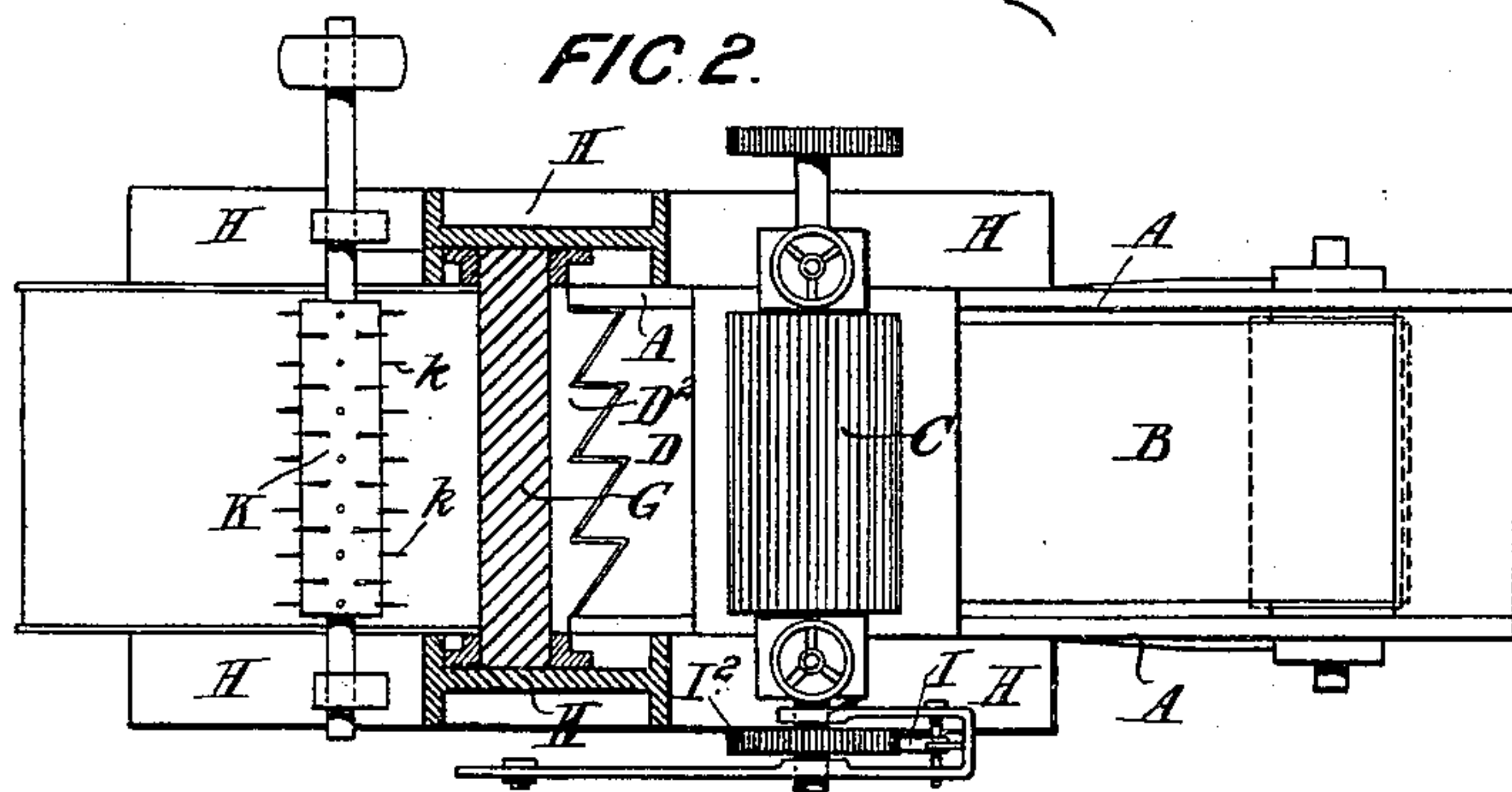
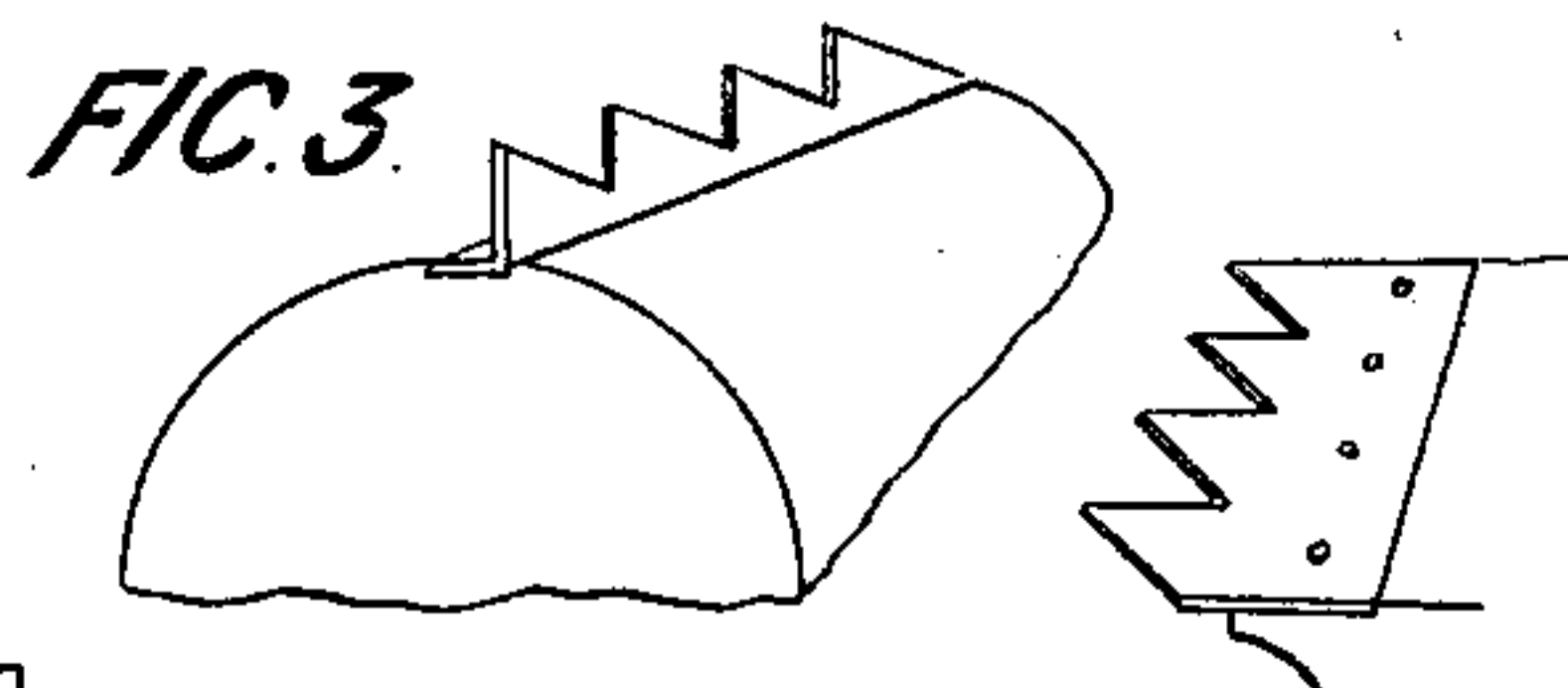
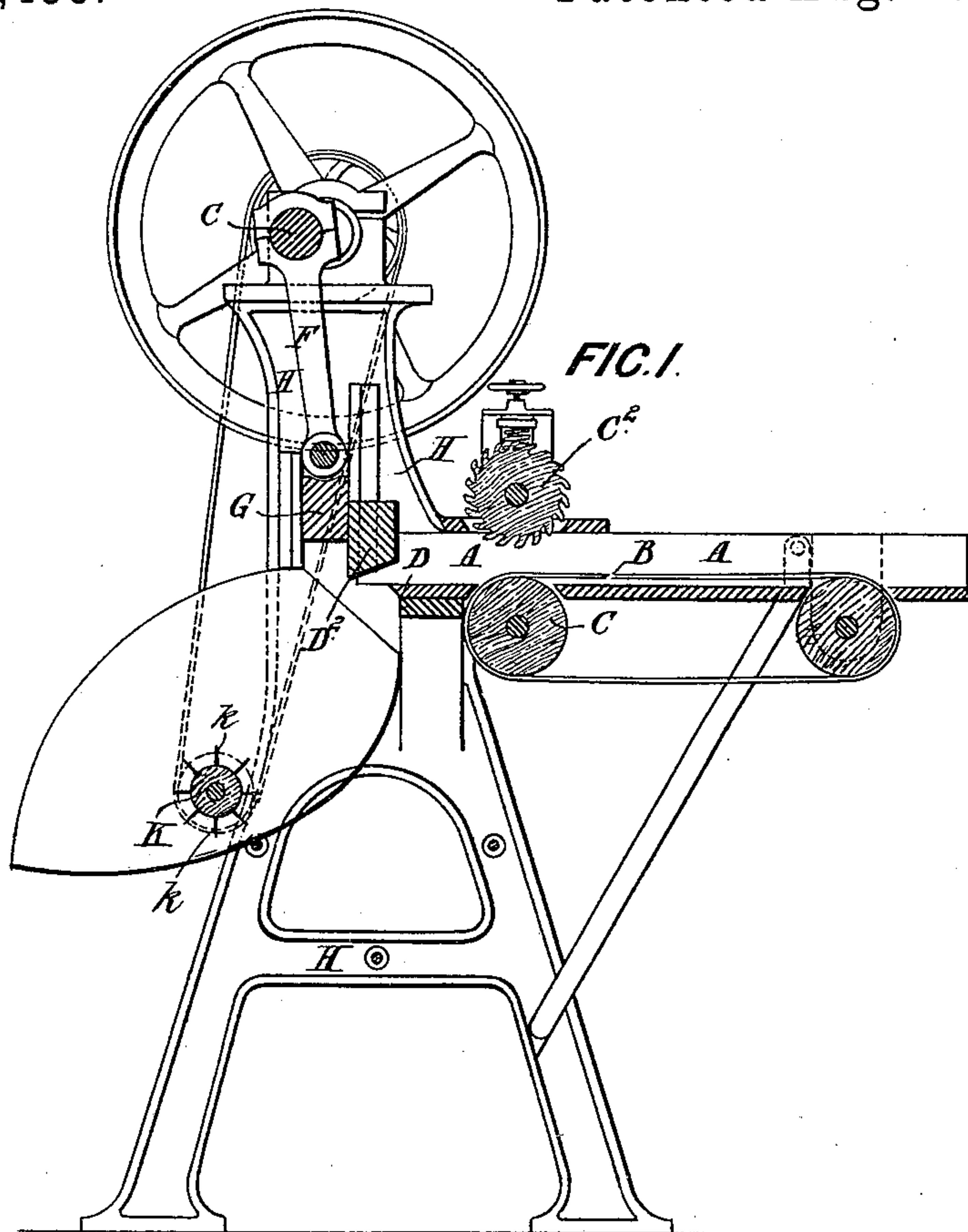
(No Model.)

J. H. TURVEY.

MACHINE FOR CUTTING RAGS OR OTHER MATERIAL.

No. 368,435.

Patented Aug. 16, 1887.



Witnesses:  
*Alex. Barkoff*  
*William D. Souner*

Inventor:  
*John H. Turvey*  
by his Attorneys  
*Howson & Son*



# UNITED STATES PATENT OFFICE.

JOHN HENRY TURVEY, OF EAST MALLING, COUNTY OF KENT, ENGLAND,  
ASSIGNOR TO GEORGE FREDERICK BUSBRIDGE, OF SAME PLACE.

## MACHINE FOR CUTTING RAGS OR OTHER MATERIAL.

SPECIFICATION forming part of Letters Patent No. 368,435, dated August 16, 1887.

Application filed November 16, 1886. Serial No. 219,003. (No model.) Patented in England June 10, 1886, No. 7,800, and in France October 27, 1886, No. 179,282.

*To all whom it may concern:*

Be it known that I, JOHN HENRY TURVEY, engineer, a subject of the Queen of Great Britain and Ireland, and residing at East  
5 Malling, in the county of Kent, England, have invented certain new and useful Improvements in Machines for Cutting Rags or other Materials, (for which George Frederick Busbridge and I have obtained British Patent No.  
10 7,800, dated June 10, 1886, and the said George Frederick Busbridge has obtained a French patent, No. 179,282, dated October 27, 1886,) of which the following is a specification.

15 The object of this invention is to provide a machine simple in construction and efficient in action, which will cut the rags or other material (such, for example, as rope) more efficiently than will machines for the purpose as  
20 hitherto constructed.

I will describe the invention with reference to the accompanying drawings, Figure 1 of which is a sectional elevation, and Fig. 2 a sectional plan, of a machine constructed ac-  
25 cording to this invention. Fig. 3 is a perspective view of the knives separately.

I provide a trough, A, into which the rags or other materials to be cut are fed, which may be effected by a strap or moving apron,  
30 B, on which the rags or other materials are placed; or the feeding may be effected by hand, if desired. The apron B is moved or drawn along by being passed round a revolving roller, C, the said roller being the bottom  
35 one of a pair of rollers, C C<sup>2</sup>, between which the rags or other materials pass. The periphery of the upper roller, C<sup>2</sup>, is hexagonal or otherwise formed with a number of sides; or it may be fluted or grooved longitudinally,  
40 as shown, to assist the traveling and delivery of the rags or other materials to between two knives, D D<sup>2</sup>, acting as shears. These knives should not be in one straight line across the machine, but should extend in a direction  
45 lengthwise as well as transversely, so as to cut the materials simultaneously in both directions in square or other shapes. I prefer for this purpose knives shaped like the teeth of a saw, as shown in Fig. 3, the projections of  
50 one passing closely through the spaces be-

tween the projections of the other, and the relative positions of the knives being preferably angled or inclined with respect to each other, so that the cutting may commence from one end or point. This gives the shearing  
55 action referred to. The one knife, D, is fixed horizontally at the end of the trough A, and the other, D<sup>2</sup>, is moved vertically or otherwise. This may be effected by an overhead crank-shaft, E, and connecting-rod (or rods)  
60 F, attached to this knife-carrier G, to which the movable knife is fixed. This carrier G slides in vertical guides formed in the framing H; or the moving knife can be attached to a revolving roll or cylinder, as shown in  
65 Fig. 3, so that the teeth of the knives thereon pass the teeth of the fixed knife during the revolution of the said roll or cylinder, which can take place continuously or intermittently.

The feed-rollers C C<sup>2</sup> may be driven inter-  
70 mittently in the proper direction by a pawl, I, and ratchet-wheel I<sup>2</sup>, actuated from the same crank-shaft E, and the delivery-speed of the rollers to vary the length of the material when cut may be regulated by altering  
75 the throw of the pawl. As the materials are cut in thick layers or cakes, they may be separated and opened out by falling into a distributor formed by a rapidly-revolving roller, K, on the periphery of which are projections  
80 k, and this roller may throw the material forward to any required receptacle.

Although the drawings show two knives, it will be evident that a double set or more of them may be employed, if necessary. 85

I am aware of the machine for granulating cocoanuts, patented June 10, 1873, No. 139,804; but that machine differs from mine not only in the form of the teeth, but also in the im-  
90 portant particular, among others, that the toothed feed-roller over the cutter-cylinder would prevent the feed of such materials as rags directly to the cutting-edges in the manner I have shown and described.

I claim as my invention—

1. A machine for cutting rags and other material, provided with a pair of shearing-  
95 blades, both having corresponding cutting-edges substantially in the form of saw-teeth, in connection with a feed-trough to deliver 100

the material directly to the said cutting-edges,  
as and for the purpose set forth.

2. A machine for cutting rags and other  
material, provided with a pair of shearing-  
5 blades, both having corresponding cutting-  
edges extending lengthwise of the feed move-  
ment, as well as transversely thereof, to cut the  
materials into blocks, substantially as set forth.

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

JOHN HENRY TURVEY.

Witnesses:

EDWARD J. MERCER,

HENRY D. HOSKINS,

*Both of 9 Birchin Lane, London, E. C.*