

(No Model.)

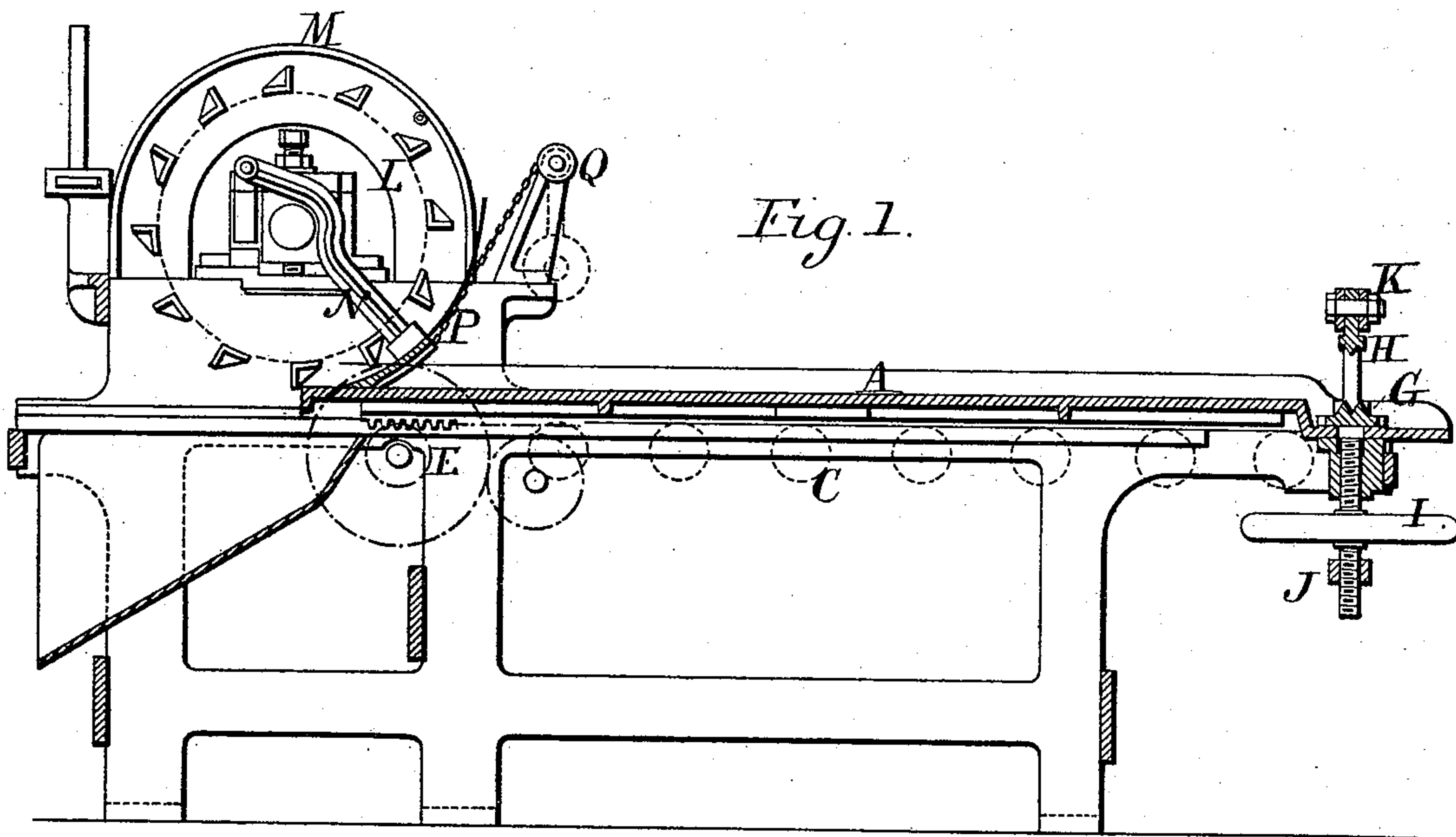
2 Sheets—Sheet 1.

E. DEATH.

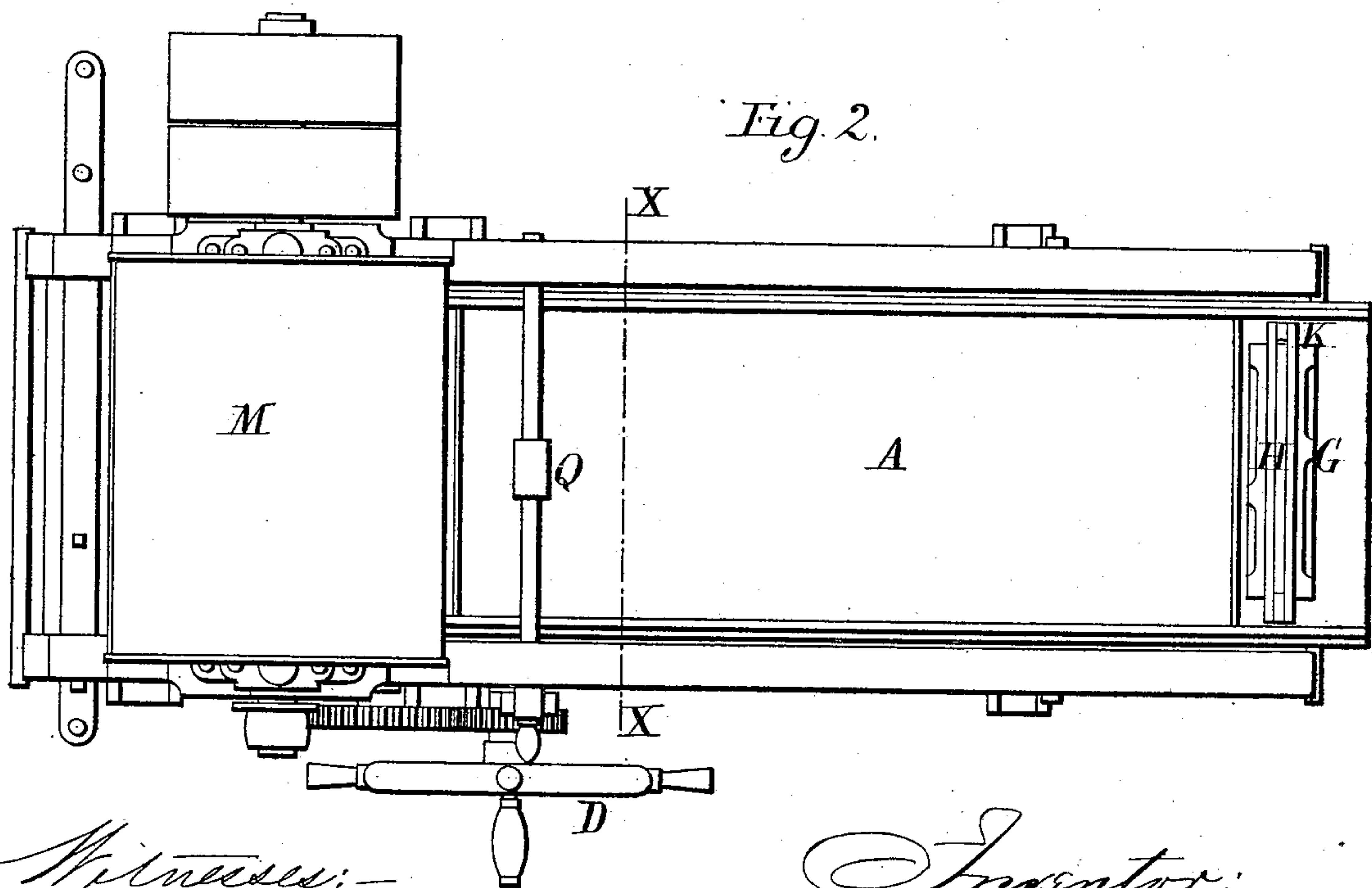
MACHINE FOR SCUTCHING AND CLEANING FIBROUS STEMS OR LEAVES.

No. 483,984.

Patented Oct. 4, 1892.



*Fig. 1.*

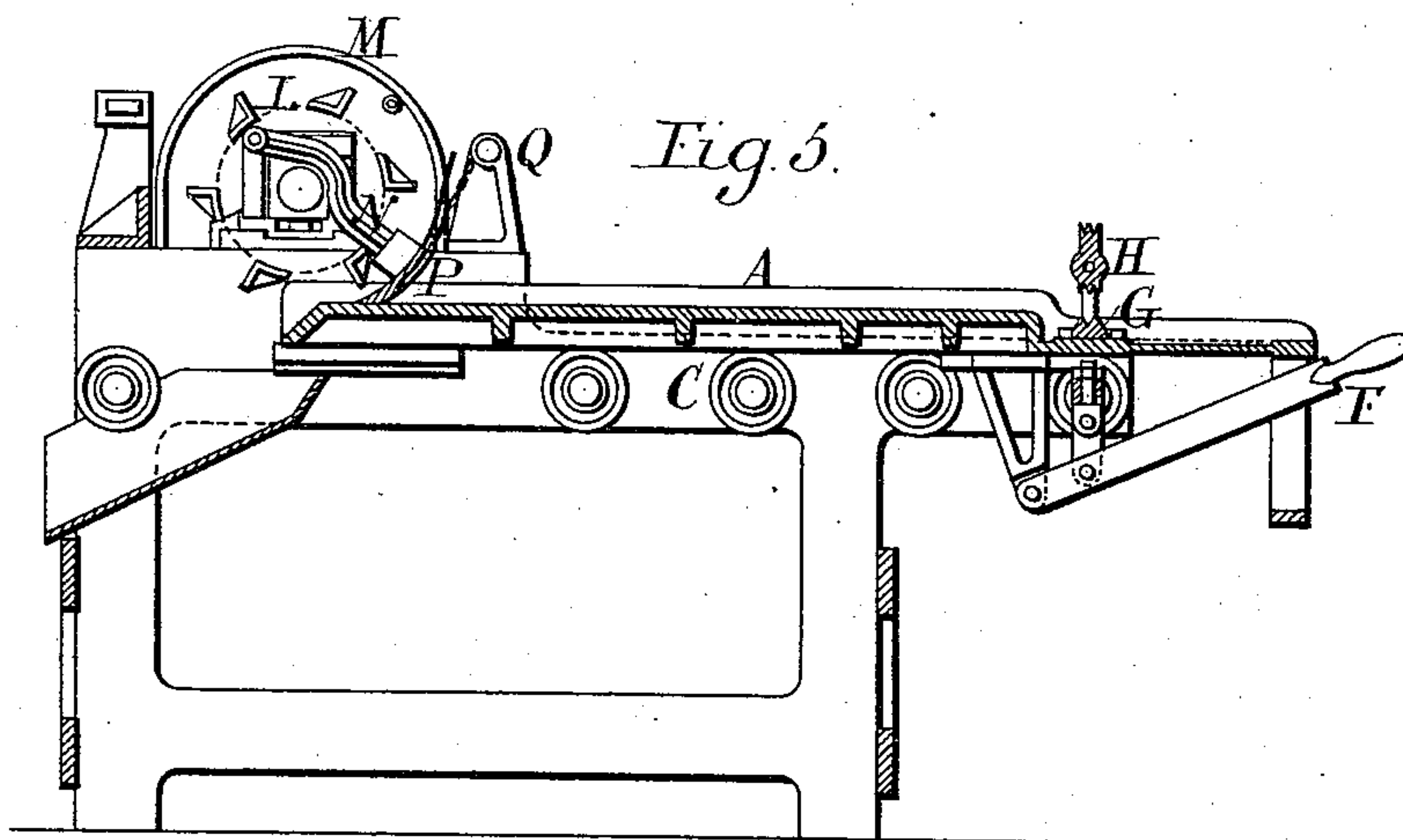
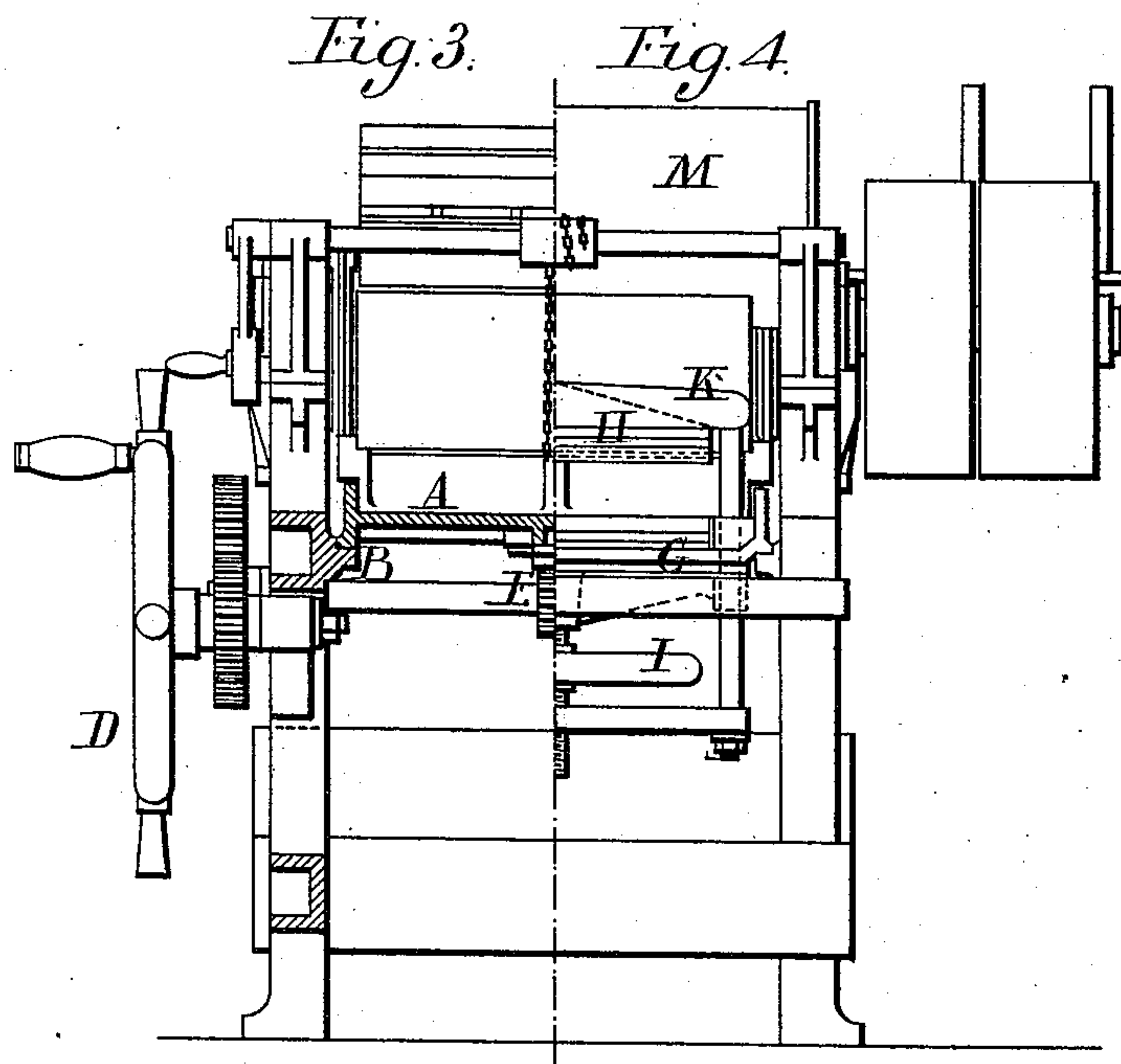


*Fig. 2.*

Witnesses:  
J. A. Rutherford  
Robert G. Smith

Inventor:  
Ephraim Death  
By James L. Norris.  
Attorney

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MACHINE FOR SCUTCHING AND CLEANING FIBROUS STEMS OR LEAVES.  
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J. A. Rutherford.  
Robert Pratt.

Inventor:  
Ephraim Death.  
By James L. Norris.  
Attorney



# UNITED STATES PATENT OFFICE.

EPHRAIM DEATH, OF LEICESTER, ENGLAND.

MACHINE FOR SCUTCHING AND CLEANING FIBROUS STEMS OR LEAVES.

SPECIFICATION forming part of Letters Patent No. 483,984, dated October 4, 1892.

Application filed January 27, 1892. Serial No. 419,450. (No model.) Patented in England July 10, 1891, No. 11,763.

*To all whom it may concern:*

Be it known that I, EPHRAIM DEATH, a citizen of England, residing at Albert Works, Leicester, in the county of Leicester, England, have invented new and useful Improvements in Machines for Scutching and Cleaning Fibrous Stems or Leaves, (for which I have obtained a patent in Great Britain, No. 11,763, dated July 10, 1891,) of which the following is a specification.

My invention relates to apparatus specially adapted for separating the pulpy portions from the fibers of the stems or leaves of fibrous plants in a green state. In such machines there is usually a feed-plate rigidly fixed level or nearly level with the axis of a revolving beater-wheel or there is a movable curve which can be advanced toward the beater.

According to my invention I dispense with the stationary feed-plate and movable curve and employ a flat table, on which I lay the stems or leaves to be operated on. The table is moved on horizontal guides, or it may be partly on rollers, to and fro under the beater-wheel, the axle-bearings of which are made adjustable vertically to suit the working distance of the beaters above the table. As the wheel revolves the beaters clean the leaves or stems laid upon the table, water being preferably, but not necessarily, distributed over them.

To hold the leaves or stems on the table, their ends farthest from the wheel are pinched in a clamp, and in order to hold the cleaned fibers down upon the table while it is being drawn back a curved plate or presser is lowered upon them, this presser extending across the table and being carried by radial arms, so that it can be moved up or down nearly concentric with the beater-wheel.

Figure 1 is a side view, Fig. 2 is a plan, Fig. 3 is a half transverse section on the line X X of Fig. 2, and Fig. 4 is a half end view, of apparatus according to my invention for scutching and cleaning fibrous stems or leaves. Fig. 5 is a longitudinal section of apparatus on a smaller scale for the same purpose.

In all the figures like parts are indicated by like letters of reference.

A is the flat table, which, as shown in Fig. 3, may slide on ways B, or, as shown in Fig. 5 and by dotted lines in Fig. 1, may be ar-

ranged to run on rollers C. For apparatus of the larger sizes, as shown in Figs. 1, 2, and 3, I employ a hand-wheel D, with suitable gear and pinion acting on rack E to move the table to and fro. For the smaller sizes, as shown in Fig. 5, these parts may be dispensed with, the table being moved to and fro by hand applied to the lever F. At the end of the table is fixed on it a bar or plate G with a V-shaped groove. Above this is a V-shaped bar H, which, being brought down toward the bar G, clamps the stems or leaves that are to be operated on. This clamping may be effected, as shown in Fig. 5, by pushing down the lever F, or in the larger apparatus by turning a hand-wheel I, the spindle of which is a differential screw, causing a cross-head J to descend, and with it a double cross-head K, between the two limbs of which the clamp-bar H is pivoted at its middle, so that it can accommodate itself to inequalities of the material which it clamps.

Above the table the beater-wheel L is mounted in vertically-adjustable bearings, and is, as usual, covered by a casing M. On the bearings at each side is pivoted a radial arm N, and these arms have attached to them a curved presser-plate P, which extends across the table and serves to hold the cleaned fiber down on the table while it is drawn back. This presser-plate can be raised by the operator turning a barrel Q, winding on a cord attached to the middle of the presser-plate or by other suitable means.

Having thus described the nature of my invention and the best means I know for carrying the same into practical effect, I claim—

1. In apparatus for scutching and cleaning fibrous stems or leaves, the combination, with a revolving scutching-wheel armed with beaters, of a flat movable table carrying the material to be operated upon and means for moving said table to and fro under the scutching-wheel, substantially as described.

2. In apparatus for scutching and cleaning fibrous stems or leaves, the combination, with a revolving scutching-wheel armed with beaters, of a flat movable table carrying the material to be operated upon, a clamp for clamping the material to said table, and means for moving said table to and fro under the scutching-wheel, substantially as described.

3. In apparatus for scutching and cleaning  
fibrous stems or leaves, the combination, with  
a revolving scutching-wheel armed with beat-  
ers, of a flat movable table carrying the ma-  
5 terial to be operated upon, means for moving  
said table to and fro under the scutching-  
wheel, and a curved presser-plate for holding  
down the material operated on during the re-  
turn stroke of the table, substantially as de-  
10 scribed.

In testimony whereof I have signed my  
name to this specification, in the presence of  
two subscribing witnesses, this 14th day of  
January, A. D. 1892.

EPHRAIM DEATH.

Witnesses:

A. T. HALL,

*Aylestone Rd., Leicester,*

ARTHUR WALTON DEATH,

*Tower Street, Leicester.*