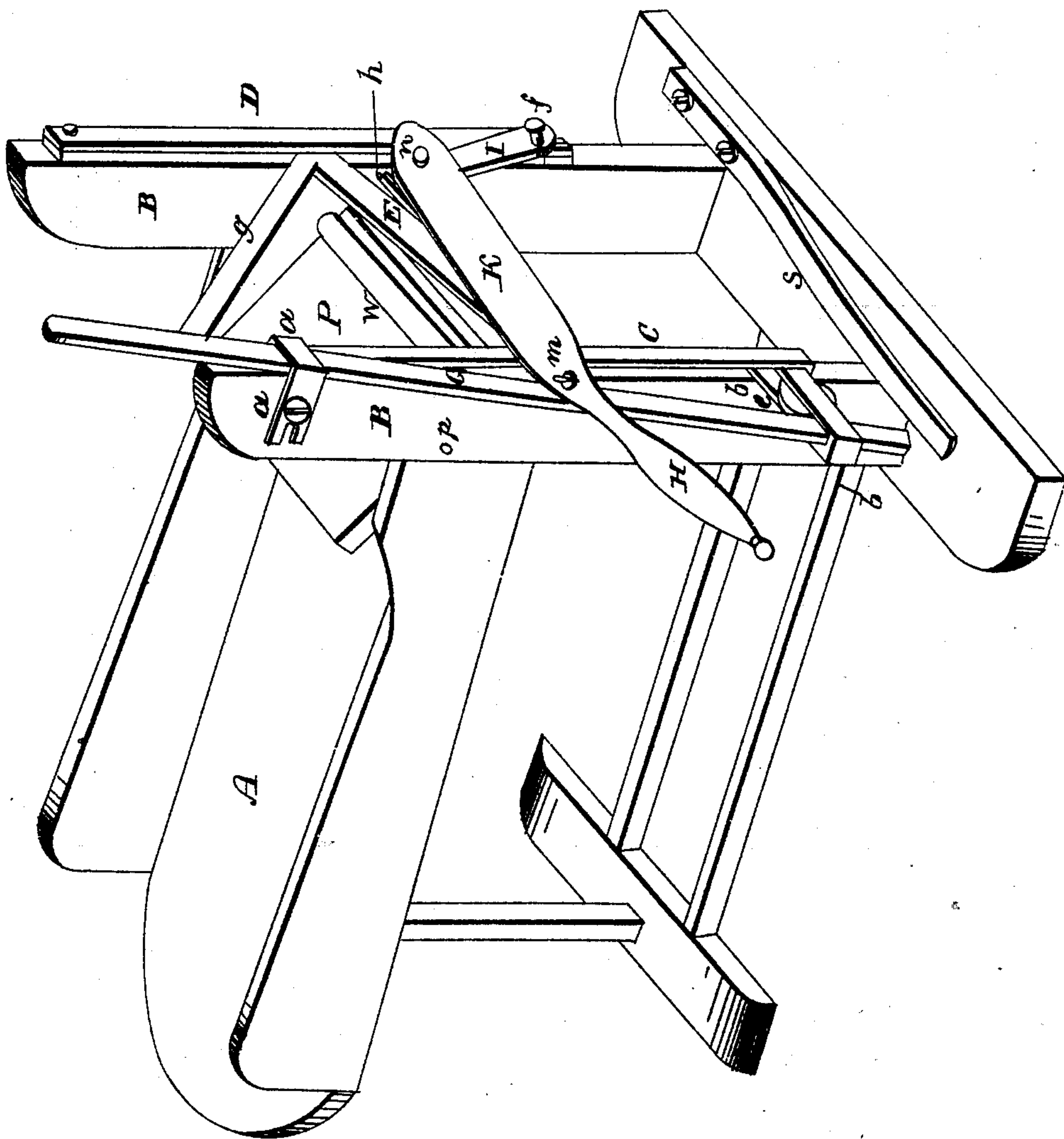


W. BARRETT.

Straw Cutter.

No. 18,946.

Patented Dec. 29, 1857.



Witnesses:

James B. Sanders,
Chas. H. Barrett

Inventor:

Wm. Barrett

UNITED STATES PATENT OFFICE.

WM. BARRETT, OF STEPHENTOWN, NEW YORK.

STRAW-CUTTER.

Specification of Letters Patent No. 18,946, dated December 29, 1857.

To all whom it may concern:

Be it known that I, WILLIAM BARRETT, of Stephentown, Rensselaer county, State of New York, have invented a new and Improved Method of Constructing Straw-Cutters; and I declare the following specification, with the drawings hereto annexed as part of the same, to be a full and perfect description thereof.

10 My machine consists of a box A to hold the straw, mounted upon legs, in the usual form of straw cutting machines, with two uprights B B at the front end of the box. Against each of these uprights is placed a
15 bar of iron C—D kept off from the surface of B, so as to allow the cutter or knife E, to pass behind, the bars acting as guides to direct the knife in its movements. The knife E is attached at one end to an iron
20 bar G and at the other to an oblique brace *g* by which it is attached to the bar. The knife being fixed at a suitable angle, oblique to the bar for cutting advantageously. The bar G is arranged against the upright
25 by passing between it and an iron strap *a* near its top, and at the bottom through the loop of an iron strap *b b* which projects from the upright in the range of the face or front of the machine so as to direct the
30 movement of the bar G in an oblique and not perpendicular line. The lower side of the bar runs upon a friction roller *e* between the bar and the upright.

35 The upper edge of the knife with its brace passes between a horizontal bar *h*, lying opposite the end of the bottom of the box and connecting the bars C and D, the straw being clipped off between the box and the bar.

40 The knife is operated by a handle H attached to a broad or flat piece of wood or metal K. The farther end of K is pivoted to a link L at *n* which drops down a short distance and is also pivoted to the front of
45 upright B at *f*. The end of K next to the handle is pivoted to rod G at *m*. The flat piece K extends, when the knife is at half a stroke across the range of the bottom of the

box and is broad enough so as at any part of the stroke to intercept the passage of the straw being cut, it being intended as a gage to the length of the cut straw. The space between the knife and the gage K can be regulated to increase the length in the cut, by placing blocks between the knife and the
55 rod G and between the link L and K at the pivot *n*.

The straw is to be fed to the knife by hand, and to bring it in proper condition for cutting it passes under the press-board P, which is a square board pivoted at *p* and having near its front edge a weight *w*. The straw is to be passed under the board which keeps it compact and in order for the knife.

On the foot board is placed a spring S arranged to lie under the end of the bar G, its object is to catch the downward stroke and assist in its upward movement, relieving the operator during that movement.

It will be plainly seen from the foregoing description, that the operation of the knife differs from other knives used in straw cutting machines using the hand knife. In them the knife cuts either directly across the straw or else with the scissors cut. But in this machine the oblique movement of the knife as it moves up and down in its guides produces a drawing cut, like that of a well managed razor in the operation of shaving by which the straw is drawn down toward the angle formed by the knife and the bar *h* instead of being pressed by the knife, if in the least dull, from that point, and torn rather than cut.

What I claim as my invention and desire to secure by Letters Patent is—

The combination of gage K and its handle H, with the bar G, and link L, and spring S, by means of which an oblique drawing as well as downward movement is given to the knife, substantially as set forth in the above specification.

WM. BARRETT.

Witnesses:

JAMES B. SANDERS,

RICHD. PARRET DE WITT.