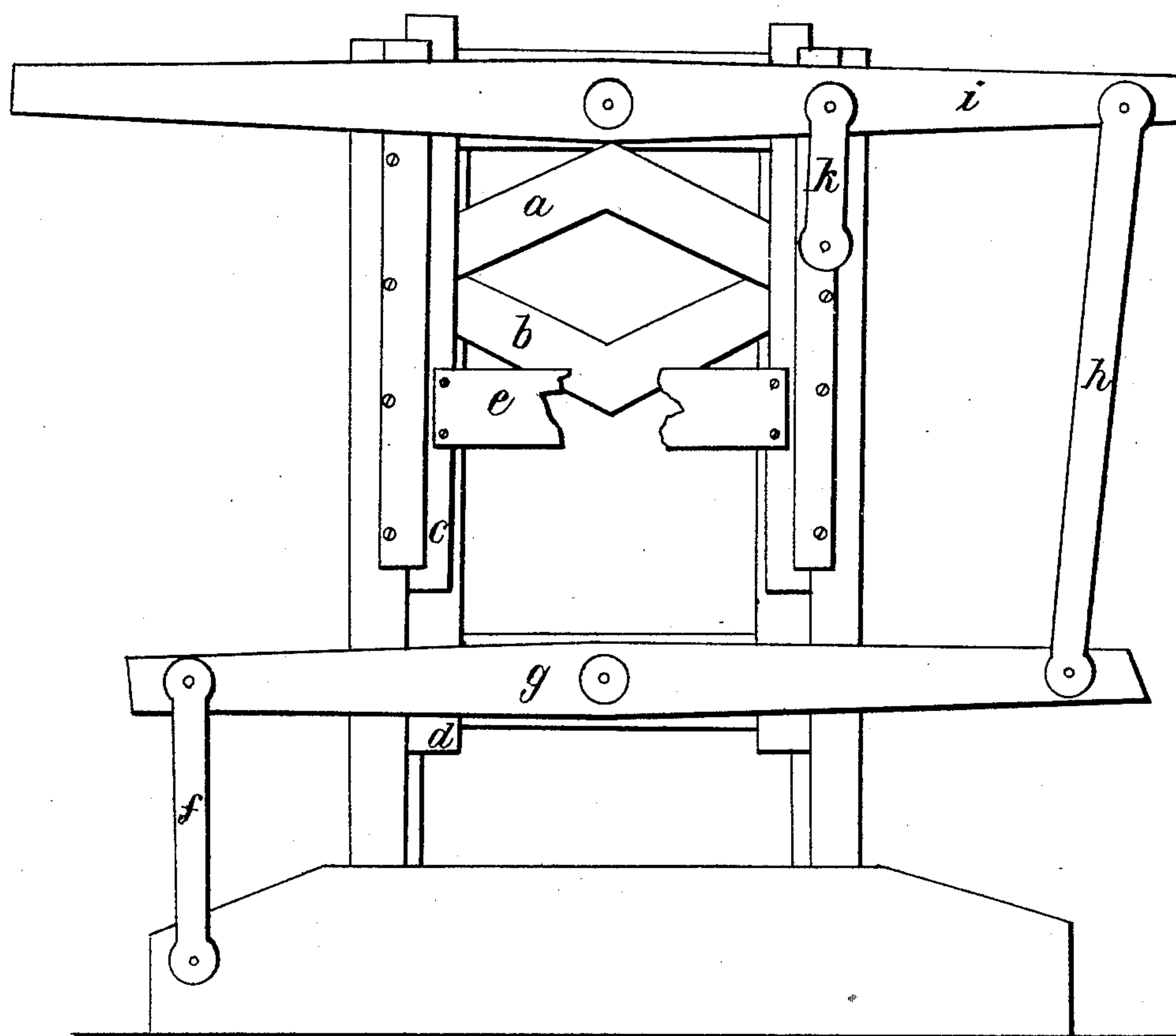


S. M. YEAMAN.

Straw Cutter.

No. 11,918.

Patented Nov. 7, 1854.



UNITED STATES PATENT OFFICE.

S. M. YEAMAN, OF ELIZABETHTOWN, KENTUCKY; OWEN R. THOMAS ADMINISTRATOR OF
SAID S. M. YEAMAN, DECEASED.

STRAW-CUTTER.

Specification of Letters Patent No. 11,918, dated November 7, 1854.

To all whom it may concern:

Be it known that I, S. M. YEAMAN, of Elizabethtown, Kentucky, have invented a new and useful Improvement in Straw-
5 Cutters; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the annexed drawings, made part of the same specifications, and in which drawing the
10 operative parts of the machine are fully shown in front view.

The nature of my invention consists in the arrangement of mechanical devices below described for the purpose of operating upon
15 the straw by means of a pair of angular knives, through the space between which, when the sliding frames on which the knives are fastened are thrown past each other, the straw is passed against a gage board car-
20 ried by the sliding frame of the upper knife, the frames being operated by a system of levers and links in front of the frames and arranged so as to aid in pressing the knives against each other as they reciprocally pass
25 and thus insure a clean even cut and short straw of equal length.

It is unnecessary to describe the ordinary frame and feeding trough of a straw-cutting machine. My invention is applied to
30 the two front uprights and is clearly shown in the drawings by the positions of the sliding frames (*c*) and (*d*) with their knives (*a*) and (*b*) and the gage board (*e*) with part broken out so as to show more
35 fully the knives, seen in red lines.

(*f*) is a link moving on the base-front board of the machine and affording a vibrating fulcrum for the lever (*g*) of the rear sliding frame (*d*) to which the lower
40 knife (*b*) is fixed. This lever (*g*) extends beyond and across the front of the machine and pivots on the center-line (vertically) so as by the vibrations of this horizontal lever (*g*) the slide (*d*) shall be passed up or
45 drawn down. The other end of this lever

connects by a long link (*h*) to a similar lever (*i*) similarly arranged at the top of the front of the machine with a movable vibrating fulcrum (*k*), similar to the link (*f*) and pivoted to the slide frame (*c*) of the upper
50 knife.

Now in working the knives by lever (*i*), if it be so pressed as to face knife (*a*) toward knife (*b*) the link or rod (*h*) will at the same time draw knife (*b*) toward knife
55 (*a*).

It will thus be seen that although the guides (*l*) of the sliding frames might work loose during a press of work, as often occurs in livery stables, yet my arrangement of
60 levers and gage board can be pressed up to their work and the knives kept close together as they are made to pass each other, and the sliding frames, their knives and the gage board kept in an exact position
65 and distance relatively to each other in all their motions even when the sliding frames would of themselves choke from wearing loose, unless held to their work by the bearing against them of the upper lever, which
70 lever is pivoted directly over the angle of the knife to the cross piece holding the knife.

I do not therefore claim the knives, nor the sliding frame, nor the system of levers, nor the gage board, separately and in de-
75 tail considered; but

What I claim and desire to secure by Letters Patent, is—

My method of arranging the operating parts of a straw cutting machine, for the
80 purpose of making it, by the pressure exercised, during the operation on the driving lever, work close, and be effective; when otherwise arranged from working loose, it might choke, or not cut at all.

S. M. YEAMAN.

Attest:

JOHN H. BENNETT,
C. GODFREY WINTERSMITH.