E. TAYLOR.

Straw Cutter.

No. 3,811.

Patented Nov. 6, 1844.

Fig. 1

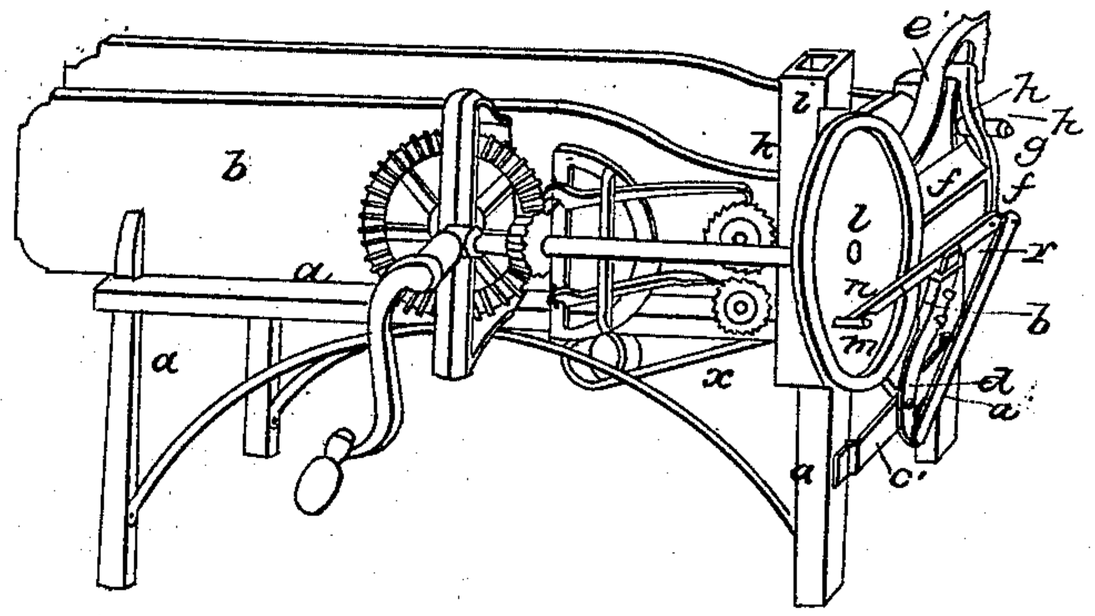
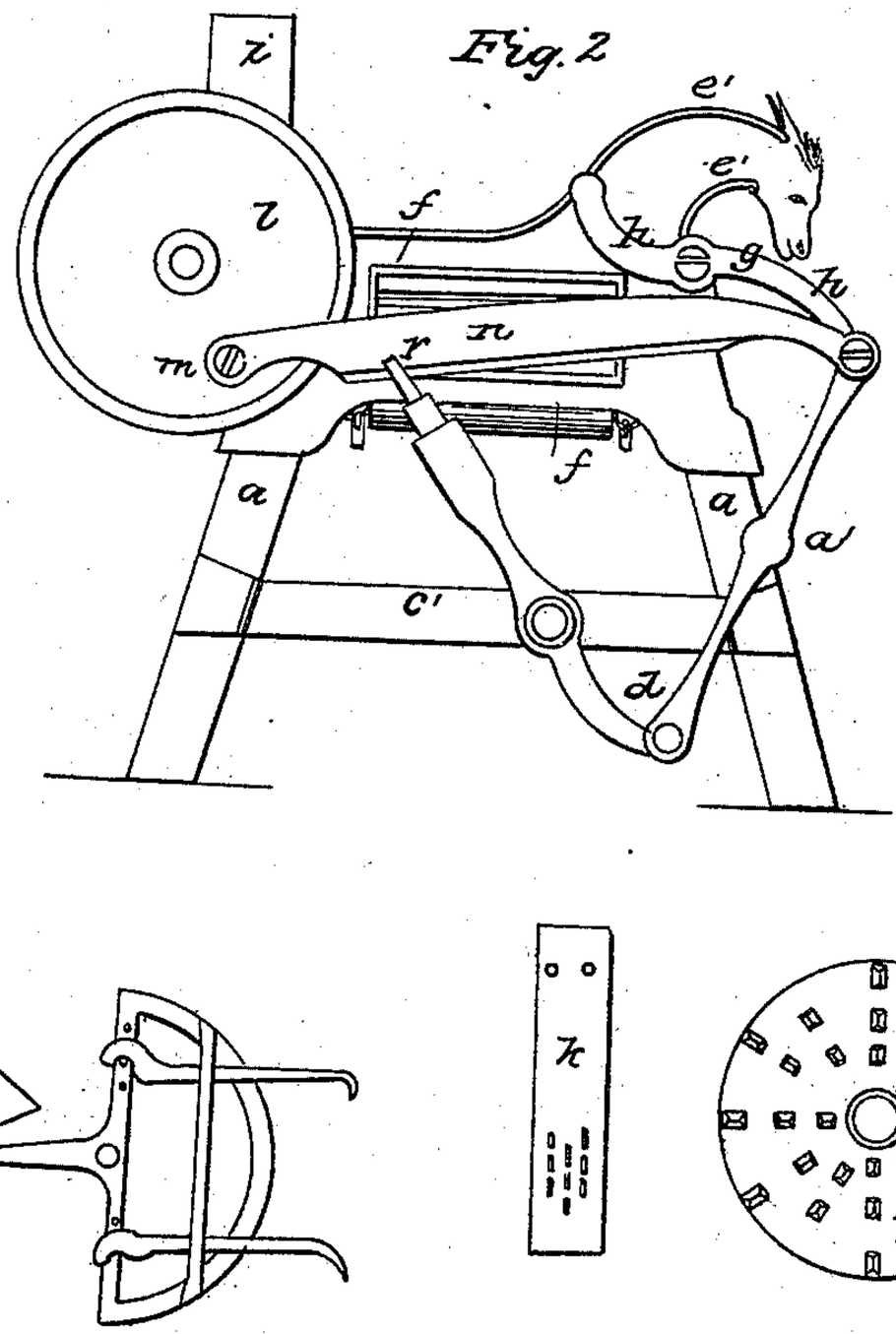


Fig. 2



UNITED STATES PATENT OFFICE.

E. TAYLOR, OF ROCHESTER, NEW YORK.

STRAW-CUTTER.

Specification of Letters Patent No. 3,811, dated November 6, 1844.

To all whom it may concern:

Be it known that I, E. TAYLOR, of Rochester, in the county of Monroe and State of New York, have invented a new and useful Improvement in Straw-Cutting Machines; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view; Fig. 2 a front elevation.

The nature of my improvement consists in constructing a straw cutter with a straight knife in such a manner that the knife may be continually kept sharp by means of an adjustable whet stone or other sharpening material operating upon its edge by the combined relative motions of the adjustable whet stone and knife consequent on the motion of the machine thereby setting the edge of the knife in toward the straw rest.

The construction is as follows: On a suitable frame (*a*) is attached a horizontal trough box (*b*) in front of which there is a cast iron piece having an oblong aperture therein extending across the front end of the trough and surrounded by a flanch (*f*) that projects outward and through which the straw is brought to be cut. Against the outer edge of this flanch the knife (*n*) plays. At one end of the casting which we are describing is an elevated piece (*e'*) curved and so constructed as to represent a horse's head and neck by way of ornament. This device I adapt in constructing my machines. The curved upper edge which forms the neck of the horse has a flanch which serves as a guide to the upper end of a lever (*h*) which lever acts upon a stud (*g*) projecting out from the face of the casting at the center of the circular curve (*e'*) as its fulcrum; to the lower end of this lever the knife is attached by a point or set screw. The opposite end of the casting has a square vertical box (*i*) on it used as a corn sheller box and constructed in the usual manner; in front of this box the balance wheel (*l*) revolves, the inside disk of which being armed with studs acts as the sheller. In front of this wheel and near the periphery there is a pin or crank wrist (*m*) upon which one end of the knife (*n*) is fastened, the other being jointed to the lever (*h*) as above described. There is also jointed to this lever besides the knife the upper end of a pitman (*a'*) its lower end being jointed to a lever (*d'*) which lever has a box at its upper end in which the scythe stone or other sharpener (*r*) is placed, which stone may be pressed up against the edge of the knife if required by means of screws acting against a spring on the back of the stone, in the side of said box. This lever has its fulcrum near the middle of a bar (*c'*) extending across the front of the machine and attached to the two front legs of the frame. By the rotation of the wheel (*l*) the knife being raised and lowered acts upon the arm of lever (*h*) which vibrates the pitman (*a'*); the action of this pitman upon the lower arm of lever (*d'*) giving the desired angulous motion to the stone along the edge of the knife. This stone may be taken out at pleasure or placed in any situation by means of the screws placed in the side of the box which receives it.

Having thus fully described the nature of my invention, what I claim therein as new and desire to secure by Letters Patent is—

The adjustable whetstone so arranged and combined that it shall meet in its ascending angulous motion the edge of the knife, in its descending angulous motion thereby setting the edge in toward the straw rest, and giving the edge of the knife an appearance much like that of a sickle.

E. TAYLOR.

Witnesses:

LAFAYETTE CALDWELL,
RICHARD KEY WATTS.