

J. H. TABLER.
Flax Brakes.

No. 197,063.

Patented Nov. 13, 1877.

Fig. 1.

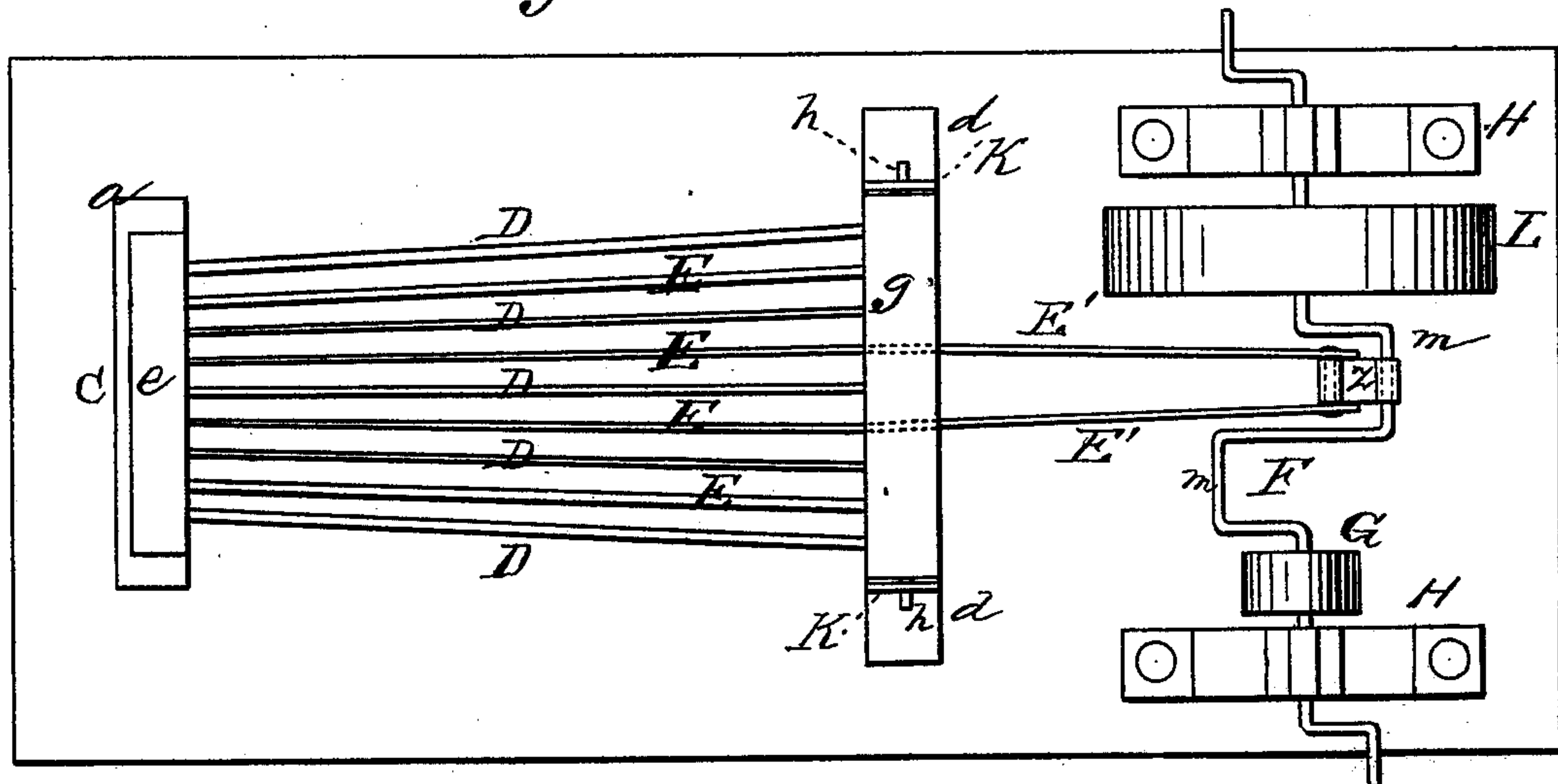
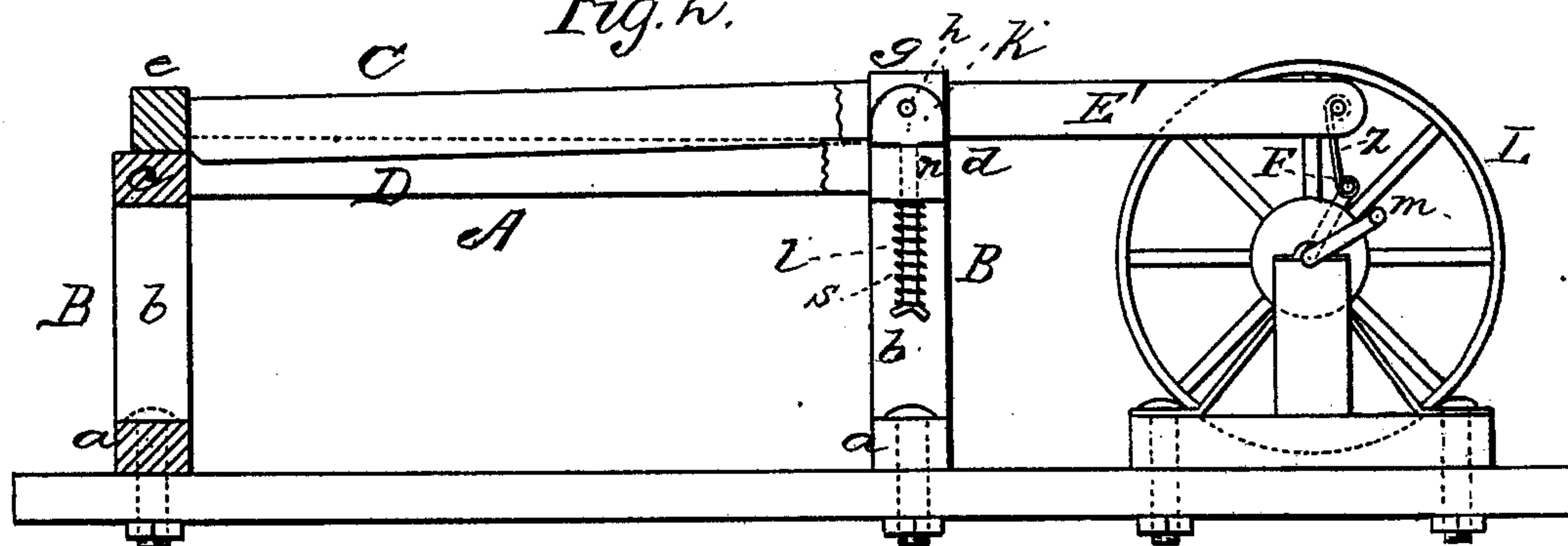


Fig. 2.



WITNESSES

M. S. Utley.
F. J. Kellase

INVENTOR

John Henry Tabler.
By E. W. Anderson.

ATTORNEY

UNITED STATES PATENT OFFICE.

JOHN H. TABLER, OF MOUNT JULIET, TENNESSEE.

IMPROVEMENT IN FLAX-BRAKES.

Specification forming part of Letters Patent No. **197,063**, dated November 13, 1877; application filed February 10, 1877.

To all whom it may concern:

Be it known that I, JOHN H. TABLER, of Mount Juliet, in the county of Wilson and State of Tennessee, have invented a new and valuable Improvement in Flax-Brakes; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a top view of my invention, and Fig. 2 is a longitudinal sectional view thereof.

This invention has relation to hemp and flax brakes; and it consists, mainly, in the construction and novel arrangement of the vibrating upper slat-frame, its yielding or spring hinge or connection with the frame of the bed-slats, the cranked or bent driving-shaft, and its link-connection with rear extensions of the upper slats, as hereinafter shown and described.

In the accompanying drawings, the letter A designates the main frame of the brake. This consists of transverse end supports B, connected to the bed-slats of the brake. Each end support consists of a sill, *a*, into which are mortised, or otherwise securely fastened, standards *b*, and which extend upward to support the transverse or end bars *c d* of the frame, to which the stationary brake-slats are secured. D indicates the stationary or bed slats of the brake, extending longitudinally between the bars *c d*, to which they are attached. Usually these slats are arranged somewhat nearer each other at their front than at their rear ends. C designates the upper vibrating brake-frame. This consists of front and rear transverse bars *e g*, arranged above the end bars *c d* of the main frame, and connected by the longitudinal slats E, two of which have extensions E' to the rear to form the lower arm of the frame, whereby it is connected to the driving mechanism. These slats, at their rear ends, when the hemp or flax receives its finishing stroke, barely meet the level of the slats of the lower frame, but extend below it at their front ends. This is designed to protect the fiber and prevent it from being broken

at first. The increasing lap of the oblique or upper slats is from rear to front, the upper slats playing between the lower ones. Through the rear or hinge bar *g* a rod, *h*, is passed, extending at each end to form pivots, which pass through perforations or bearings in the flat vertical ears *k* of the spring-bolts *l*. These pass downward through perforations *n* in the bar *d* of the main frame, and extend below the same to receive the spiral springs *s*, the lower ends of which abut against lugs, for which a series of perforations are provided in each bolt. By means of these springs the force of the blow is regulated. By pressing the spring hard up against the bar *d*, and holding it by the key in this position, the tension is increased, and with it the force of the blow of the slats. F indicates the driving-shaft, which has a number of cranks or bends, *m*, equal to the number of brakes employed. These bends are arranged in rear of the brakes, which are sufficiently widely spaced to prevent the workmen from being in each other's way. This shaft is provided with suitable bearings in boxes on standards or supports H. G represents the belt-wheel, whereby suitable power is connected to drive the shaft and its vibratory frames. To each bend or crank is connected a collar or link, *z*, which is attached to a transverse pin or connection between the ends of the lever-extensions E' of the slats of the upper frame. The cranks of the shaft are extended in reverse directions, or balanced so that when the shaft is in operation the vibratory frames will not operate in unison, but one after the other alternately. The elastic construction of its hinge permits the rear portion of each vibrating frame to rise and allow the collar or link on the shaft to pass the centers and continue its revolution if a stick or other substance too strong to be broken should get into the brake. L represents a fly or balance wheel on the shaft, serving to give it proper momentum.

Having described this invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a brake, the combination, with the main slat-frame, of the vibratory upper slat-frame having pivots and spring-bearings, and

a lever extending to the rear, substantially as specified.

2. The combination of the pivoted bar *g*, provided with spring-bearings, the rear extensions *E'* of the upper section of the brake-frame, the spring-link *z*, and the crank *m*, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOHN HENRY TABLER.

Witnesses:

ANDREW W. LIGON,
D. G. CRUDUP.