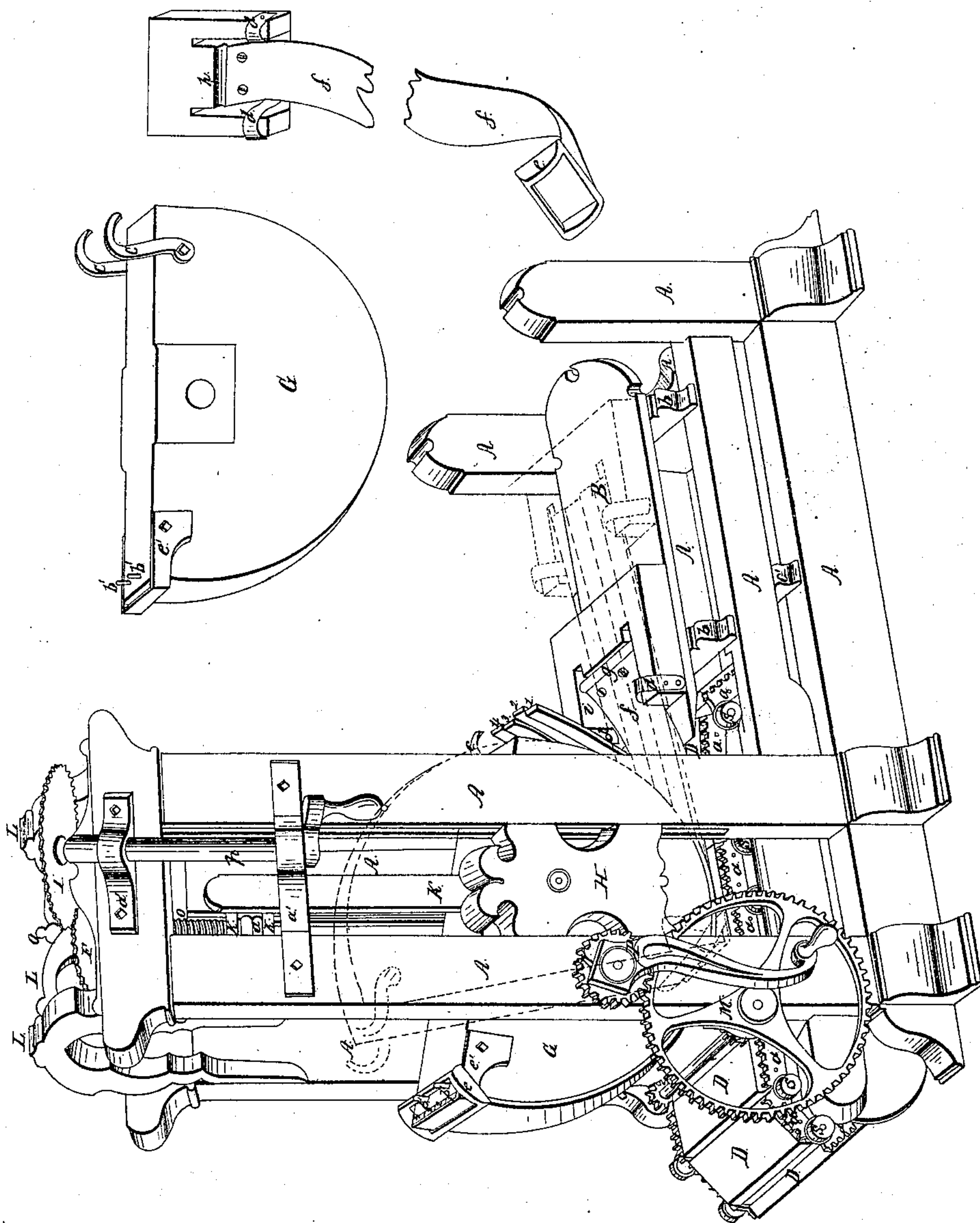


E. J. Wydegraff,
Bending Wood.

N^o 14,636.

Patented Apr. 8, 1856.



Witnesses:

George L. Shetter
John G. Erney

Inventor:

Edward J. Wydegraff

UNITED STATES PATENT OFFICE.

EDWARD J. UPDEGRAFF, OF YORK, PENNSYLVANIA.

MACHINE FOR BENDING WOOD.

Specification of Letters Patent No. 14,636, dated April 8, 1856.

To all whom it may concern:

Be it known that I, EDWARD J. UPDEGRAFF, of York, in the county of York and State of Pennsylvania, have invented a new and useful Machine for Bending Wood; 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, in which the figure is a perspective view.

The nature of my invention consists in an endless chain platform operating beneath a form which moves upon a center, and which being pressed hard down upon it by means of a screw, receives motion as the platform imparts it.

The construction of the machine can be described as follows:

A represents the principal frame; the slide H operates in the grooves of the uprights in A, being sustained by the frame K and adjusted by the screw *o*.

D is an endless chain platform moving upon the wheels *z*.

N is a pinion turned by the crank P, and working in the cog-wheel M upon the shaft *x* gives motion to the pinions *m* which work in the links *a*. The wheel F combines a nut in its center which contains the screw *o*, and is turned by the wheel I upon the shaft *p*.

G is a form upon which the wood is bent.

f is a strap drawn tightly around the outside of the wood as it is bent, having the clevis *e* attached to one end and the block E to the other.

In the operation of the machine the dotted lines represent the form, strap, block, and wood, as in the starting position; the

strap lying upon the platform D with the clevis *e* hooked over the pins *c*, one end of the wood being stuck in the clevis *e'* it comes between the strap and the form G which being now pressed hard down by means of the screw *o* turns upon the pin *r*, (which passes through its center,) as the platform D moves along. The last end of the wood is placed in the block E. The crank P being now turned in the proper direction the platform D is caused to move, carrying around the form G bending tightly over it the wooden pieces 1 2 3 4 until coming to the last end, (the block E having followed up,) the cross bar *g* is brought under said ends when the hooks *c* are hooked over the bar *g* thus securing the ends tightly to the form. The spring *u* upon which the lower end of the screw *o* presses, is designed to accommodate the pressure to any irregularities there may be in the platform, &c.

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

The peculiar method of operating the form upon which the wood is bent, by bringing it hard down upon the platform by means of the screw *o* and giving it motion by means of the platform beneath it (whether endless chain or otherwise) as above described separately and in connection with the arrangement of the wheels F and I, the screw *o*, the spring *u*, the frame K, and the slide H substantially as set forth.

EDWARD J. UPDEGRAFF.

Witnesses:

GEORGE M. SHETTER,
JOHN G. ERNST.