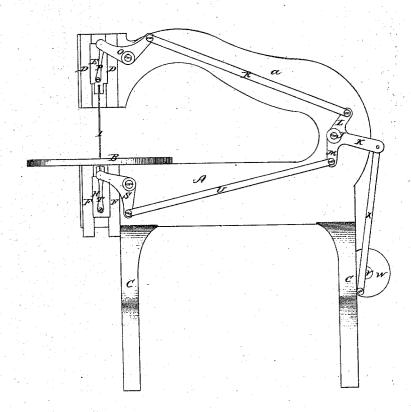
I. Blandin,

Jig Saw.

NO. 104,410.

Patented June 21.1870.



Witnesses. Charles F. Brown: Jos. C. Saft. Inventor, Thomas Blandin by Canollo Uright.

## United States Patent Ofsice.

## THOMAS BLANDIN, OF CHARLESTOWN, MASSACHUSETTS.

Letters Patent No. 104,410, dated June 21, 1870.

## IMPROVEMENT IN JIG-SAWS.

The Schedule referred to in these Letters Patent and making part of the same.

I, THOMAS BLANDIN, of Charlestown, in the county of Middlesex and State of Massachusetts, have invented certain Improvements in Jig-Saws, of which the following is a specification.

The figure represents a side elevation of my inven-

This invention consists in a peculiar arrangement of bell-crank levers, connecting rods, and pitmen, whereby a jig or scroll-saw is operated, as will hereinafter more fully appear.

In the drawing-

A represents the saw-frame, provided with the curved neck a, circular table B, and legs, C.

On the end of neck a are the vertical ways D, in which slides the cross-head E.

F F represent ways under table B, and in line with ways D.

H is a cross-head, which slides in ways F.

I represents the saw, which is attached to crossheads E and H, and passes through the center of table B.

J represents a bell-crank lever, pivoted at the end of neck a, near cross-head E.

One arm of said lever is connected to said crosshead by the pitman P, while the other arm is connected by rod R to the arm L of lever J.

S is a bell-crank lever, which is pivoted near crosshead H, and connected to the same by pitman T and to the arm M of lever J by rod U.

V represents the driving-shaft, which is provided

with pulley W, and this latter is eccentrically connected by rod X with arm K of lever J.

The operation will be readily seen to consist in the vibratory motion imparted to lever J by means of pulley W, communicated through rods R and U to levers OS, and from thence to cross-heads E H and saw I, through pitmen P T, these latter being pivoted, at one end, to said cross-heads, and at the other to said lever. The motion thus produced is steady and particularly easy, as the pitmen P T allow the utmost freedom of motion to levers O S, yet, at the same time, operate the saw effectually.

It will be seen that when the pitman T is in a perpendicular position, the pitman P is inclined, as shown, and vice versa. This arrangement prevents any "deadcenters," and, consequently, any strain on the saw.

Having thus fully described my invention, What I claim as new, and desire to secure by Let ters Patent, is-

The arrangement of levers O, S, and J, pitmen P T, connecting-rods R, U, and X, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

THOMAS BLANDIN.

Witnesses:

CARROLL D. WRIGHT, CHARLES F. BROWN.