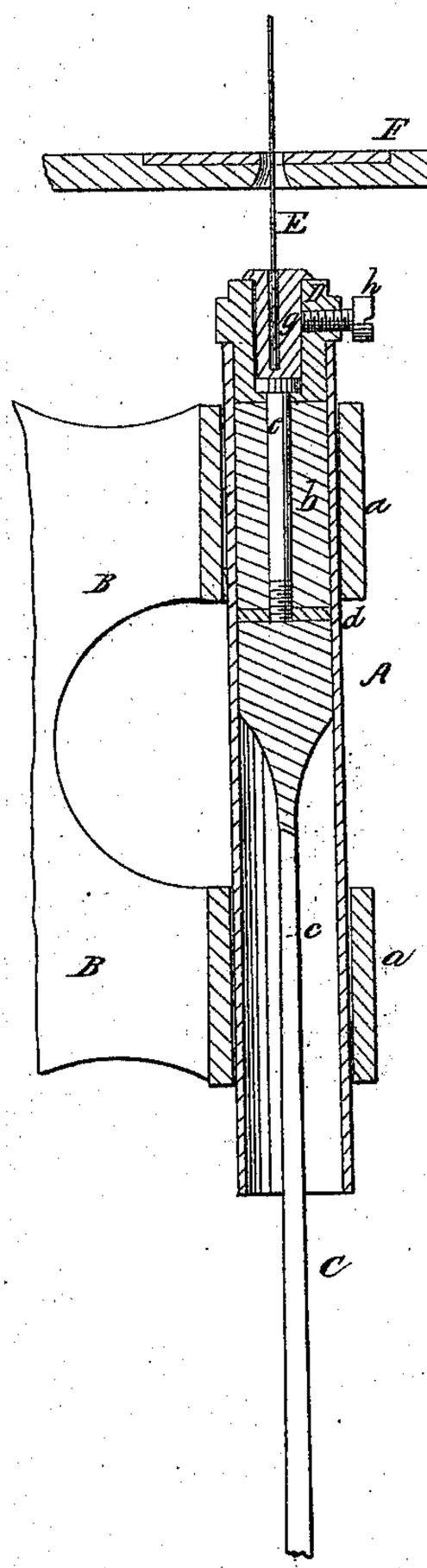
J. Richards,

Scroll Sawing Machine,

No. 35,391, Patented May 27, 1862.

Fig. 1.



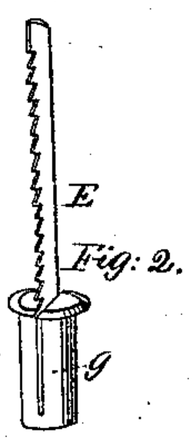


Fig. 2.

Fig. 3.

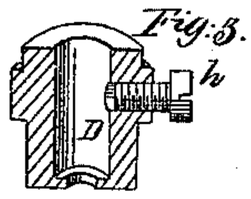
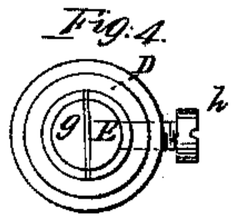
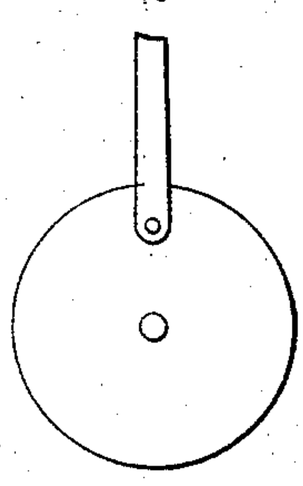


Fig. 4.





Witnesses.
Gustavus Kellerick
Edwin S. Jacobs.

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UNITED STATES PATENT OFFICE.

JOHN RICHARDS, OF COLUMBUS, OHIO.

IMPROVED SCROLL-SAW STOCK.

Specification forming part of Letters Patent No. **35,391**, dated May 27, 1862.

To all whom it may concern:

Be it known that I, JOHN RICHARDS, of Columbus, in the county of Franklin and State of Ohio, have invented a new and useful Improvement in Scroll-Saw Stocks; 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, forming part of this specification, in which—

Figure 1 is a sectional view of a scroll-saw stock and part of the mill. Fig. 2 is a perspective view of the split pin for clamping the saw in the stock, the saw being set in the split thereof. Fig. 3 is a sectional perspective view of the socketed head of the stock. Fig. 4 is a top end view of the stock with saw-blade in it.

Similar letters of reference in the several figures indicate corresponding parts.

The nature of my invention consists in the tubular guiding-stock, which admits the upper end of the pitman into it and allows the pitman to deflect or bend within its lower portion, the said stock constituting a part of the length of the pitman without interfering with its flexibility or rendering the length too great, and also serving as a firm lower support and guide to the saw-blade.

It consists, second, in a split pin, in combination with a tubular or socketed head-piece and a set-screw or its equivalent for fastening the saw-blade in the tubular stock.

It consists, third, in the socketed perforated head-piece, in combination with the bored pitman, its tapped holdfast, and a headed screw-bolt for the purpose of connecting the pitman and tubular stock together.

To enable others skilled in the art to make and use my invention, I will proceed to describe the same with reference to the drawings.

The stock A is made hollow and out of wrought-iron pipe, so that it, while answering the office designed for it, shall have the requisite strength and stiffness with the least amount of weight. The outer circumference of the stock is made with flat portions, and is fitted within guide-boxes *a a* of a strong bracket, B, of the saw-mill frame, so that it cannot turn, but is free to move up and down.

The pitman C has its upper end made solid and stiff, as at *b;* but below the portion *b* it is thin and flexible, so that while its solid portion affords a firm and strong support and holdfast to the guiding-stock A its flexible portion *c* shall allow the necessary deflection from a straight line to take place as the eccentric revolves. It will be seen that the portion *b* of the pitman extends up nearly to the top of the guiding-stock from near the middle thereof, and fits snugly to the inner circumference of the same. It will also be seen that the flexible part *c* extends up into the stock from the bottom of the stock to about the middle thereof, and there connects with or branches out into the solid portion *b*, as shown. This arrangement makes the guiding-stock a part of the length of the pitman, and yet does not add greatly to its length necessarily, inasmuch as the full or nearly the full flexibility of the pitman is allowed to come into play within the tubular stock. The pitman is fastened within the stock and to a socketed head-piece, D, by means of a nut, *d*, and bolt *e*, fastening the pitman, as it were, to the end of the saw. The socketed head-piece has a flange or collar near its upper edge and a screw-bolt hole through its bottom. This head sets down into the upper end of the stock A and upon the solid portion of the pitman, and is sustained thereby and by its own collar resting on the edge of the stock. Through the hole in the bottom of the socket the headed screw-bolt *e* is passed down into a bored socket in the portion *b* of the pitman and takes its hold in the nut *e*, which is set in the base of the socket of the pitman, as shown. The head of the screw-bolt has its seat on the bottom of the socket.

The saw-blade E, which plays up and down through the table F, is fastened into the socket-head of the stock A by means of a split collapsible pin, *g*, and a set-screw, *h*, the pin fitting down into the socket-piece D and the set-screw passing through one side of the socketed piece and binding against one side of the pin, so that when the saw-blade is set in the slot or split of the pin it is clamped firmly. This mode of securing the saw-blade allows of it being set at any desired rake, and admits the saw to be turned in position for adjustment. The pitman is made without a movable joint at the top; but it springs enough to accommodate the vibration.

My improved guiding-stock shortens the whole length of the reciprocating parts, for if the pitman is attached to the lower end of the stock the length of the stock is added to the height of the saw-mill, making the distance between the top of the table and the crank or eccentric too great; but when the pitman is inserted into my guiding-stock its length is maintained almost completely, and yet a long guide-stock for supporting and guiding the lower end of the saw secured, and all within a short distance. The guide-stock is also relieved of a portion of the strain by reason of the socketed head being disconnected from the stock and bolted to the pitman.

I do not claim fastening a saw-blade by means of a set-screw; but

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

1. A guiding-stock and pitman combined and operating substantially in the manner and for the purpose described.

2. The combination of a split pin and set-screw or its equivalent with a scroll-saw blade and the upper end of a pitman, substantially as and for the purpose described.

3. The combination of the socketed head-piece, pitman, and screw bolt and nut, substantially as and for the purposes described.

Witness my hand and seal in the matter of my application for patent on improved scroll-saw stock this 14th day of April, A. D. 1862.

JOHN RICHARDS. [L. S.]

Witnesses:
GUSTAVUS DIETERICH,
EDWIN S. JACOB.