J. F. GAGE & C. F. LINSCOTT.

Saw-Frame.

No. 213,889. Patented April 1, 1879.

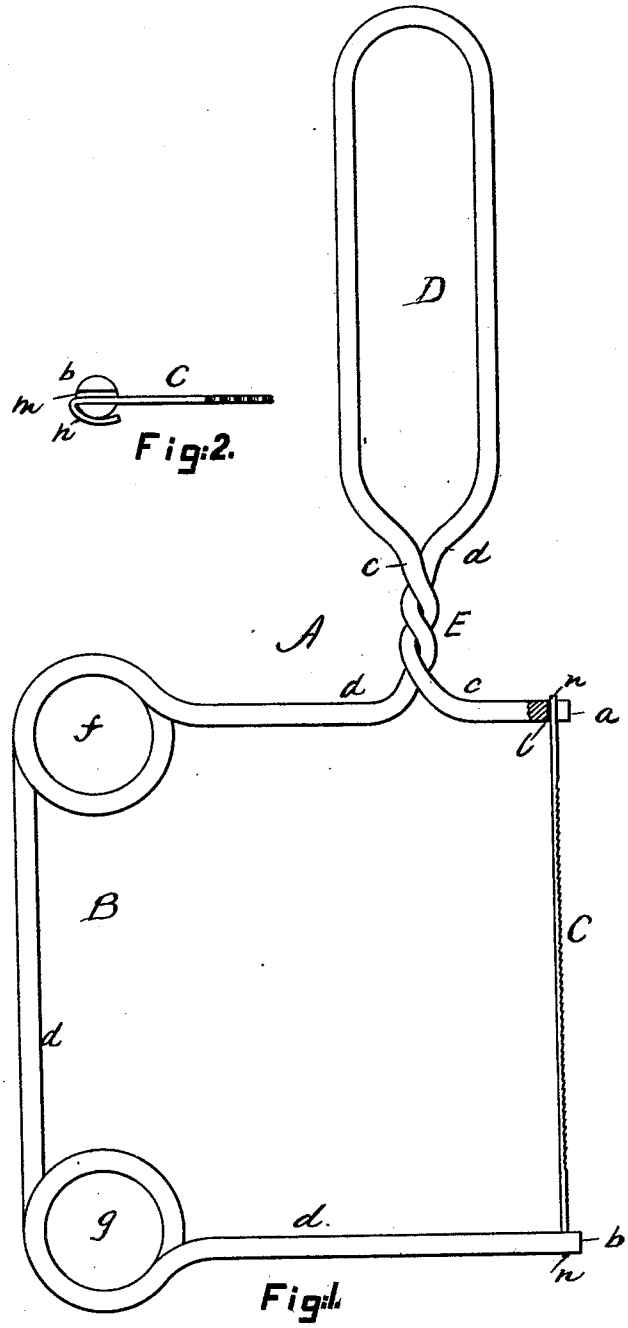


Fig:2.

Fig:1.

Witnesses.

Chas. E. Hibbard

W. S. Bellows

Inventor.

J. F. Gage

and C. F. Linscott

By Brown Bros.

Attorneys

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JULIUS F. GAGE AND CHARLES F. LINSCOTT, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN SAW-FRAMES.

Specification forming part of Letters Patent No. **213,889**, dated April 1, 1879; application filed November 27, 1878.

To all whom it may concern:

Be it known that we, JULIUS F. GAGE and CHARLES F. LINSCOTT, both of Boston, in the county of Suffolk and State of Massachusetts, have invented a certain new and useful Improvement in Frames for Saws, of which the following is a full, clear, and exact description:

This invention relates to a novel construction of frames for saw-blades, applicable to all kinds of saw-blades, but more particularly intended for saw-blades for fret-work; and it consists in forming the frame carrying the saw and its handle of one piece of wire of any suitable metal, all substantially as hereinafter fully described.

In the accompanying plate of drawings our invention is illustrated, Figure 1 being a side view of a saw-frame and its handle constructed according to this invention, having a saw-blade for fret-work attached thereto; Fig. 2, a view in detail.

In the accompanying drawings, A represents our improved saw-frame and handle, in which B is the frame portion, carrying the saw-blade C, and D the handle.

This frame B and its handle D are formed of one piece of wire, bent to the form desired, and in such a manner that the two ends *a* and *b* of the wire will be opposite to or in line with each other in proper position for the attachment thereto of the saw-blade. The wire is preferably of spring-steel.

The wire is first bent to form the handle D, substantially as shown in the drawings, and the two portions *c* and *d*, where they meet, are twisted together, as shown at E, and one portion, *c*, of the wire is then bent one way, or at right angles or thereabout to the handle, and the other portion, *d*, in an opposite direction. The one, *d*, being the longer portion, is then bent or formed substantially into an arch or bow form, the wire coiled at *f* and *g* to form coil-springs, and the end *b* then brought to a point in line with the end *a* in proper position to attach the saw-blade thereto.

The two ends *a* and *b* of the wire have open slots *l* and *m*, in which to insert the saw-blade.

Each end of the saw-blade is bent to form a hook, *n*, as shown more particularly in Fig. 2, which is a view enlarged of one end of the wire, showing the end of the saw-blade in the slot.

Pressing the two ends *a* and *b* of the wire toward each other, the saw-blade can then be inserted in the slots, when, releasing the ends of the wire, the spring of the coils *f* and *g* will force the ends *a* and *b* to bear against the hooked ends of the saw-blade, and thus firmly and tightly hold it in proper position for use.

Twisting the two portions of the wire at E gives a rigidity and strength to frame and handle, and the open slots in the ends of the wire enable the saw-blade to be easily and readily detached from the frame, as is obvious.

The coiling of the wire at *f* and *g* can be dispensed with, as it can be simply bent at such points; or it can be coiled more than once, if desired, although, as shown, having one coil produces good results.

Saw-blades for other purposes than for fret-work can be used, if desired, the wire being of a proper size therefor.

The twisted portion E can be soldered, if deemed necessary, to increase its strength; or if the whole is tinned after being formed as described, as it might be desirable to do to prevent rust, the same result is accomplished.

The open slots in the ends of the wire afford a ready and easy means of attaching and detaching the saw-blade to and from the frame, which is cheaper, simpler, and more convenient than if attached by pins, &c.

The ends of the saw-blade, instead of being bent, as described, can be enlarged to prevent slipping through the slots when in the frame.

A frame for a saw-blade and its handle, when made of one piece of wire, substantially as herein described and shown, is simple, cheap, light, convenient, durable, and very desirable, especially for use on light work.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. A saw-frame and its handle constructed from a single piece of wire, having its ends brought to a vertical line, and the extremities slotted for the reception and retention of the saw-blade, substantially as described.

2. A saw-frame constructed from a single piece of wire, having the arched or bowed portion formed into one or more coils, substantially as described.

3. A saw-frame made from a single piece of wire, brought together and twisted, as at E, to form the handle, the end *c* bent at right angles to the handle, and the other end, *d*, bent to form the arch, and the opposite end for the attachment of the saw, substantially as shown and described.

4. A frame and a handle for a saw-blade made of one piece of wire, having said wire twisted substantially as and for the purpose described.

JULIUS F. GAGE.
CHARLES F. LINSCOTT.

Witnesses:
EDWIN W. BROWN,
W. S. BELLOWS.