G. Bedson,

Rolling Wire,

No. 49,598, Patented Aug. 22, 1865.

Fig. 1.

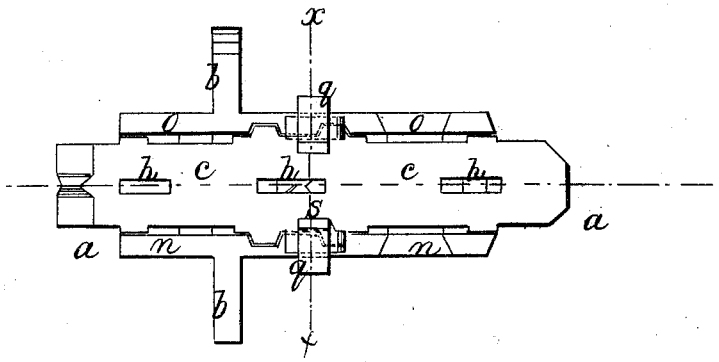

Fig. 2.

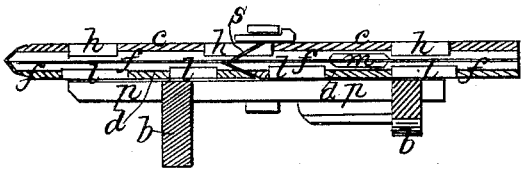

Fig. 3.

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GEORGE BEDSON, OF MANCHESTER, GREAT BRITAIN.

IMPROVED APPARATUS FOR ROLLING WIRE.

Specification forming part of Letters Patent No. **49,598**, dated August 22, 1865.

To all whom it may concern:

Be it known that I, GEORGE BEDSON, city of Manchester, county of Lancaster, Great Britain, have invented a new and useful Improvement in Rolling Wire; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

The present invention consists in a new mode of constructing guiding devices to be used in the rolling of wire, the principal objects thereof being to prevent any breakage of important parts of the machine, and to allow "spills" or other such detached portions of the metal to escape.

My improvement is represented in accompanying plate of drawings, of which Figure 1 is a plan or top view; Fig. 2, a central longitudinal section, and Fig. 3 a transverse section in plane of line *x x*, Fig. 1.

a a represent my improved guide, which is attached to and upon the frame-work of the rolling-machine by the cross-bar *b* thereof, and in and between any two sets of rollers used. The guide formed in two parts, *c* and *d*, placed one upon the other, in the contact-faces of each of which, and extending their entire length, a similar longitudinal groove, *f*, is formed, the two together forming an opening, *g*, of a square or any other desired shape. (See Fig. 3.) In both parts *c* and *d* are apertures *h h*, &c., and *l l* in upper and lower, communicating with central opening, *g*, of guide, and which may be or not opposite to each other, also similar apertures, *m m*, &c., in their sides. The parts *c* and *d* are thus placed together in and between the side pieces, *n* and *o*, of the bottom plate, *p*, fastened to the cross-bar *b*, secured to the frame-work of the machine, and are then held tightly therein by means of clamps *q q*, of which there may be any desired number, the aperture or longitudinal opening *g* of the guide being horizontal, and extending from one set of rollers to another, and in the same plane as the opening in the rollers through which the metallic bar which is being rolled passes. Each end of the guide is rounded off, conforming to the periphery of the rolls, so that they can be brought near thereto.

As the wire is rolled and passes through the tube of the guide, arranged and constructed as described, in case any portions should become detached from the same, which often occurs, they drop or fly out of the tube through the apertures *h* and *l* made therein and communicating with the same, thus preventing their interference with the free passage of the wire; and, furthermore, if any resistance should, from any cause whatsoever, be given to the bar being rolled, by securing the guide within its frame, as described, the breakage of any important part of the machine is prevented, as the clamps will necessarily be the first to yield.

For convenience, and to facilitate the removal of any one guide from its frame or the machine when desired to insert another with a different size and form of tube, I divide each of its parts at or near the center into two parts, their joints or splits being at an angle to the direction of the guide, as seen at *s* in Fig. 2, which it is evident enables them to be easily removed.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

A guide to be used in the rolling of wire having the general form and construction herein described, and for the purposes specified.

GEORGE BEDSON.

Witnesses:

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