WIRE STRETCHER AND GRIPPING DEVICE.

(No Model.)

Fig. 1.

Fig. 2.

Fig. 3.

Witnesses:

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WIRE STRETCHER AND GRIPPING DEVICE.

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To all whom it may concern:

Be it known that I, WILLIAM S. BROWN, a citizen of the United States of America, residing at Bayneville, in the county of Sedgewick and State of Kansas, have invented certain new and useful Improvements in Wire Stretcher and Gripping Devices, of which the following is a specification, sentence being had therein to the accompanying drawings, and the figures of reference thereon, forming a part of this specification, in which—

Figure 1 is a perspective view of my invention. Fig. 2 shows the manner in which said tool is used as a gripping device and for cutting wire. Fig. 3 shows how it is used in stretching wire endwise.

My invention is in the class of tools specially adapted for grasping and stretching wire, holding bolts, rods of iron, &c., and has for its immediate object the production of a tool of moderate cost and great convenience in which the gripping power is proportionate to the applied leverage and whose jaws shall be capable of kinking and holding wire without cutting or otherwise injuring it while stretching said wire to a high tension.

1 is a pair of arms pivotally secured together, having wire-grasping jaws. A pointed fulcrum 3 is rigidly attached to one of said jaws. As illustrated in Figs. 1 and 2, a pair of shears 17 is arranged on the inner surface of said jaws near pivot 14. Said shears are for the purpose of cutting wire and bolts. Pointed fulcrum 3 is formed with a projecting shoulder 15, which shoulder is placed parallel to shears 17 for the purpose of holding the wire 5 square across said shears while cutting, which otherwise would be drawn endwise between said shears, thus springing them apart and permanently impairing their usefulness. This shoulder, in combination with the shears, forms a very important feature of my invention. If said shears should need grinding, it would only be necessary to knock out rivet 16 and turn back fulcrum 3. The jaws can then be opened up and the shears ground as much and often as need be. An elliptic ring 6 is placed on said arms, which is used for a clutch, as illustrated in Fig. 2. Said ring when not in use is held at rest by spring 12. The tool can then be used in a vertical or any other position or for any desired purpose without said ring dropping down on arms 1 and obstructing their use. Spring 12 is constructed of 55 round or any other shaped material desired, is preferably riveted to fulcrum 3, projects back parallel with arms 1, passing through ring 6, and then kinked short down alongside said ring, thus forming a notch or bed for said 60 ring, which gives it a certain and fixed position, after which kink the spring can terminate or can pass up alongside arm 1 to prevent said spring from catching on foreign objects. As illustrated in Fig. 2, one of said 65 jaws is provided with a hammer 4 for driving nails and staples. One of said jaws is formed with a transverse rib 9, while its mate 2 is formed with a lip 10, turned up. When said jaws are shut together on wire, they kink 70 said wire, as shown at 8, Fig. 3, thus retaining a powerful grip without injuring said wire. Upper jaw 2 is formed with a concave surface to fit bolts or rods of iron, as shown in Fig. 2, said concave surface being corrugated to assist in gripping.

When it is desired to stretch wire endwise, the wire is caught as shown in Fig. 3. The point of fulcrum 3 is placed against the post 11. The arms 1 are then borne down, giving the 80 wire a high tension, at which time ring 6 is pulled back on said arms, thus permanently retaining said grip and tension. Some part of the body can then be placed against the tool to keep it in position, and both hands 85 can be used to drive staples or otherwise secure the end of the wire.

Having thus described my invention, what I claim, and wish to secure by Letters Patent, is—

1. In a wire stretcher and gripping device, a pair of arms with wire-grasping jaws, pivotally secured together, in combination with a ring 6 adapted to hold the arms closed, and spring 12 adapted to hold the ring out of operative position, substantially as shown and specified.

2. A pair of arms with wire-grasping jaws, pivotally secured together said jaws being formed with wire-cutting shears next to said pivot 14, one of said jaws having rigidly connected thereto, a pointed fulcrum with projecting shoulder parallel and opposite to said shears, for the purpose shown and specified.
3. In a wire stretcher and gripping device a pair of arms with wire-gripping jaws pivotally secured together one of said jaws formed with a shear on its inner surface, its outer surface provided with a hammer and rigidly connected to said jaw a pointed fulcrum with projecting shoulder, parallel to said shears, all for the purpose shown and specified.

4. In a wire-stretcher, a pair of arms, pivotally secured together with wire-gripping jaws 2, and hammer 4, in combination with transverse rib 9 lip 10 shears 17, and pointed fulcrum 3, having projecting shoulder 15, all for the purpose shown and specified.

Witnesses: WILLIAM S. BROWN, J. A. CLARK, A. E. MCNEES.