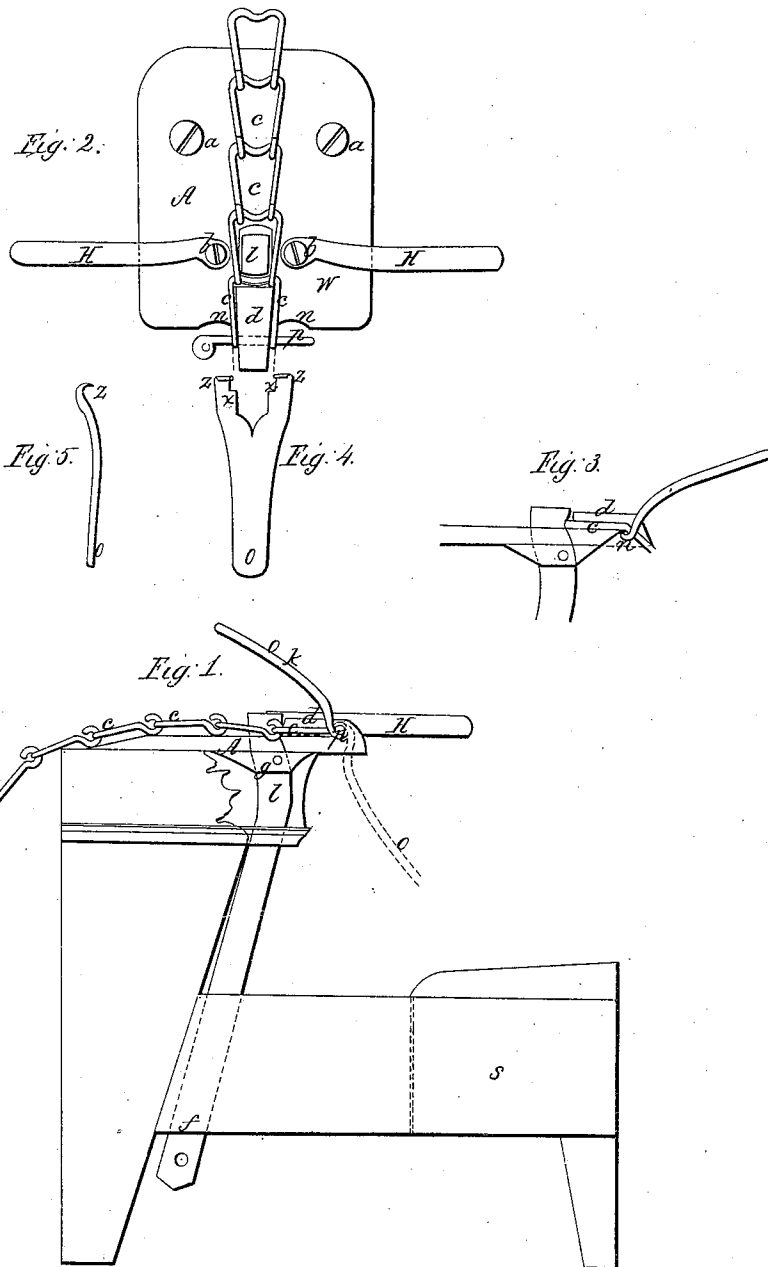


W. B. Wadsworth.

Making Chain.

N^o 88,100.

Patented Mar. 23, 1869.



Witnesses;
H. C. Lawrence

Inventor;
W. B. Wadsworth



WILLIAM B. WADSWORTH, OF CLEVELAND, OHIO.

Letters Patent No. 88,100, dated March 23, 1869; antedated March 8, 1869.

IMPROVEMENT IN MANUFACTURE OF CHAINS.

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

To all whom it may concern:

Be it known that I, WILLIAM B. WADSWORTH, of Cleveland, in Cuyahoga county, and State of Ohio, have invented new and useful Improvements in Machinery for Making Chain; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Figure 1 is a side view of the machine in operation.

Figure 2 is a view looking down on to the machine.

Figure 3 is a sectional view.

Figures 4 and 5 are views of what we call turning-iron.

In constructing, I make, of cast-iron, the form represented at A, figs. 1 and 2, having a slot for foot-lever *l f*, and a projection below for the fulcrum-pin *g* and the projection *d*, the die to form the chain around, and a notch at *n*, fig. 3.

I drill a hole for pin at *p*, figs. 1 and 2, to turn the hooks on. I fasten it on to a table, as shown in fig. 1, with the foot-lever hanging down, with a pin at *f*, for the foot to rest on, and a seat, S, to sit on while operating the machine.

I fasten the hand-levers H H with bolt *b b*, fig. 2. I take pieces of wire of the right length, and place them in the hooks of the last link, and across the machine, as shown by the red lines at W.

I then push on the foot-lever, which is shaped according to the shape of the cross-bar, and next pull the levers H H, and bring the wire around the die *d*, as shown in fig. 2, *c c*.

I next take the turning-iron, figs. 4 and 5, and place

it as shown in fig. 3, the hooks *z z* under the ridge *n*, and the shoulders *x x* on the wire, and press it down as shown in said fig. 3.

I then put the pin *p*, fig. 2, through the die, as shown, and put the turning-iron under the wire, as shown at *o*, fig. 1, and turn it up, as shown at *o k*, same figure, and that bends the end of the wire around the pin *p*, which finishes the link.

The pin *p* should be made of steel. The foot-lever has a notch, to hook on to the link *c*, to prevent its rising at that end while it is being bent down at *n*, as shown in fig. 3, for making wide links.

For making wide links, for ladders, &c., we use two levers, *f l*, one near each back corner of the die, and the two front corners of die *d* project over the form A, and turn one hook at a time.

I claim as new, and of my invention—

1. The combination of the form A, die *d*, and hooked lever *l f*, constructed and arranged substantially as described.

2. The combination of the turning-iron, fig. 4, with the form A and die *d*, substantially as described.

3. The combination, substantially as herein described, of the form A, die *d*, and levers H H and *l f*.

4. In combination with the devices set forth in the first clause of claim, the seat S, arranged substantially as described.

W. B. WADSWORTH.

Witnesses:

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