

G. P. WOOD.
Clamping-Chain.

No. 218,848.

Patented Aug. 26, 1879.

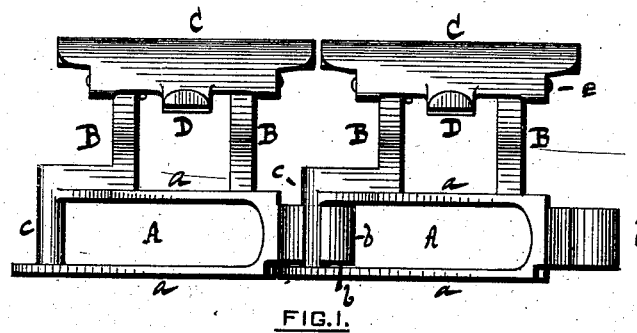


FIG. 1.

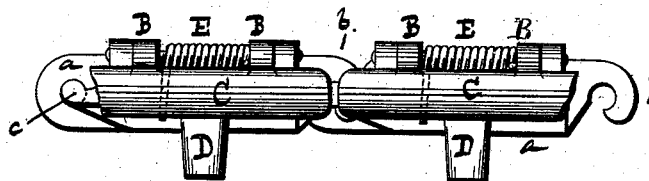


FIG. 2.

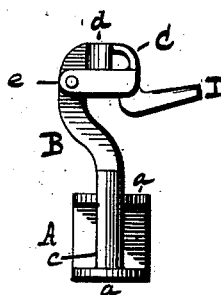


FIG. 3.

WITNESSES.

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INVENTOR.

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UNITED STATES PATENT OFFICE.

GEORGE P. WOOD, OF JOHNSTON, ASSIGNOR OF ONE-HALF HIS RIGHT TO
EDWARD RICE, OF PROVIDENCE, RHODE ISLAND.

IMPROVEMENT IN CLAMPING-CHAINS.

Specification forming part of Letters Patent No. **218,848**, dated August 26, 1879; application filed
June 6, 1879.

To all whom it may concern:

Be it known that I, GEORGE P. WOOD, of the town of Johnston, in the county of Providence, in the State of Rhode Island, have invented a new and useful Improvement in Clamping-Chains; and declare the following to be a specification thereof, reference being had to the accompanying drawings.

Like letters indicate like parts.

Figure 1 is a top plan of my invention. Fig. 2 is a side elevation of the same. Fig. 3 is an end view.

My invention is adapted for the stretching and carrying of lawns and other textile fabrics as they are passed over a nest of hot pipes or other heating apparatus for the purpose of drying them with a proper finish.

My improvement consists of a clamping-frame cast in one piece with a link, the latter so constructed, with a hook engaging with the end bar of the next adjoining link, as to be detachable from such adjoining link when brought into a certain relative position there-to.

The cloth to be dried and finished is stretched from the chain on one side to the chain on the opposite side, and is firmly held by the clamps, which shut tightly upon it. An alternate forward and backward motion is communicated to the chains by proper mechanism, the motion of one chain being reciprocal to the opposite chain. Thus, while the cloth is slowly carried forward by the chains, its fibers are subjected to a continual reciprocating motion diagonally, by means of which each fiber is dried and finished separately with a linen finish, instead of adhering to adjacent fibers, as would be the case if the dressing was dried upon them while they remained in the same relative position to each other.

Clamping-chains hitherto used for this purpose have been made of links riveted together. They are subject to much wear, because they cannot be oiled, and when, for any reason, it is necessary to remove a link, the link must be

broken, and another substituted with much labor and difficulty.

I construct the link A with parallel side bars, *a a*, and one end with a hook, *b*, the form and position of which are shown in Fig. 2, and the opposite end with a round bar, *c*, to enter and engage with the hook. This leaves a central opening, within which the gearing or cogs of the driving-wheel enter to communicate motion to the chain.

From one of the side bars projects the clamping-frame B, cast in one piece with the link, and supporting a fixed clamping-bar, *d*, extending parallel with the side bar, *a*. A spring-clamp, C, operated by a proper thumb-piece, D, has a limited motion upon its axle-rod *e*, which passes through the frame B from side to side, and which is surrounded by the spiral spring E, to give the clamp C a firm bite upon the fixed clamp *d*.

The links are detachable only when brought into a certain relative position to each other, enabling the round bar *c* to be slid out of the hook *b*.

Being thus detachable, the link is readily repaired or replaced; and as a portion of the end bar, *c*, is exposed, not being entirely inclosed by the hook *b*, it is easily oiled, and friction and wear are prevented.

I am aware that neither the detachable hook-link of a chain nor the clamping device described is separately new; but

I do claim as a new and useful invention and desire to secure by Letters Patent—

The combination of the detachable link A, made of the side bars, *a a*, hook *b*, and end bar, *c*, with the clamping-frame B, provided with the fixed clamping-bar *d*, the spring-clamp C, axle-rod *e*, and spring E, substantially as and for the purpose specified.

GEORGE P. WOOD.

Witnesses:

WM. B. W. HALLETT,
WARREN R. PERCE.