

(No Model.)

M. J. RIDDER & V. HARTMANN.
WIRE STRETCHER.

No. 446,790.

Patented Feb. 17, 1891.

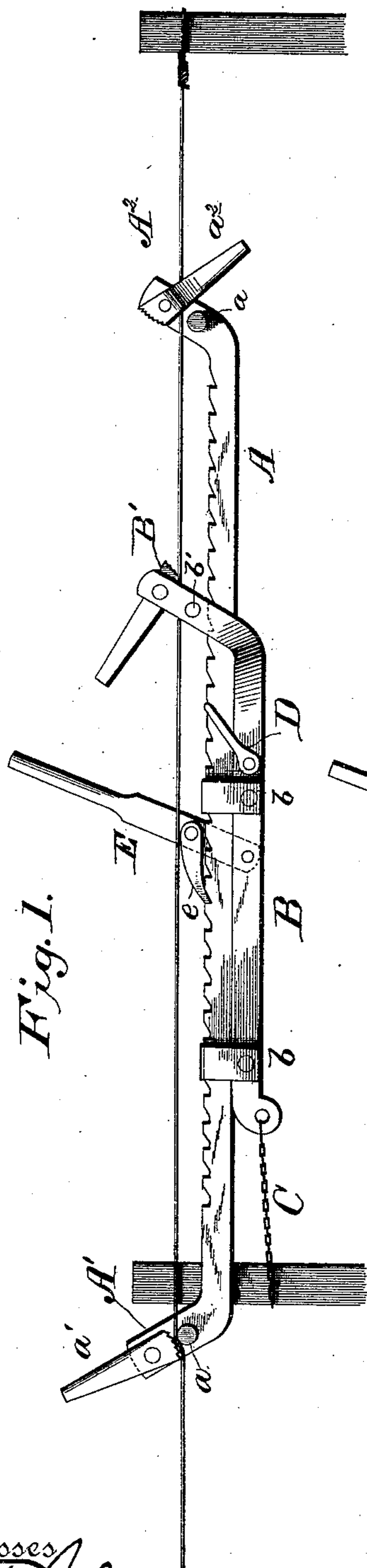


Fig. 1.

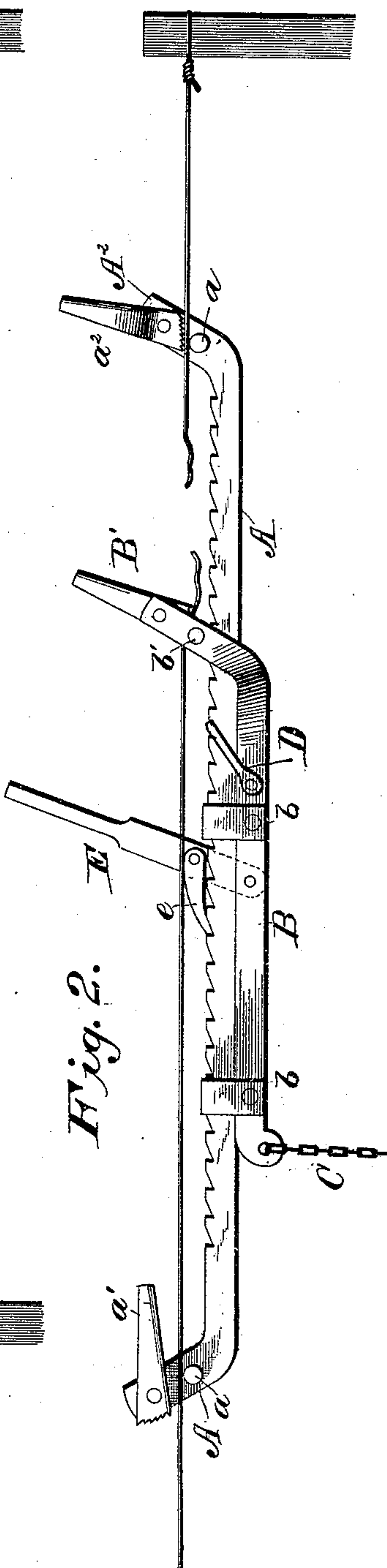


Fig. 2.

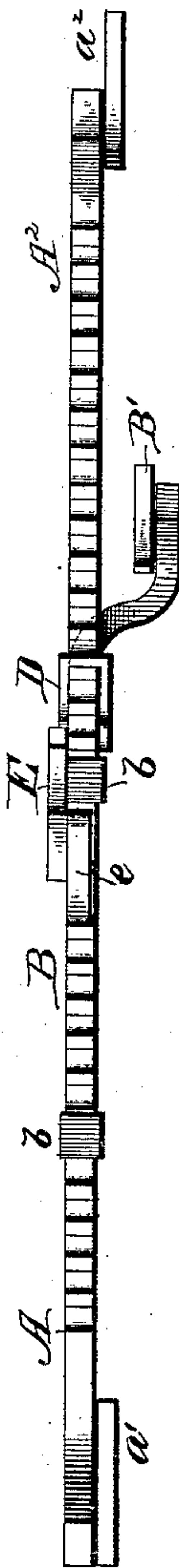


Fig. 3.

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— by

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Witnesses,

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UNITED STATES PATENT OFFICE.

MATHIAS J. RIDDER AND VALENTINE HARTMANN, OF GERMANTOWN,
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WIRE-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 446,790, dated February 17, 1891.

Application filed November 29, 1890. Serial No. 373,032. (No model.)

To all whom it may concern:

Be it known that we, MATHIAS J. RIDDER and VALENTINE HARTMANN, citizens of the United States of America, residing at German-
town, in the county of Seward and State of
Nebraska, have invented certain new and use-
ful Improvements in Wire-Stretchers; and we
do hereby declare the following to be a full,
clear, and exact description of the invention,
such as will enable others skilled in the art to
which it appertains to make and use the
same, reference being had to the accompany-
ing drawings, and to letters of reference
marked thereon, which form a part of this
specification.

This invention relates to improvements in
wire-stretchers.

The object of the invention is to provide a
simple, cheap, and effective device, whereby
the wires can be stretched between the posts
or joined together when severed; and it con-
sists in the construction and combination of
the parts, as will be hereinafter fully set forth,
and particularly pointed out in the claims.

In the accompanying drawings, forming
part of this specification, Figure 1 is a side
view of a wire-stretcher constructed in ac-
cordance with our invention, showing the
same applied in position for stretching a
wire between two posts. Fig. 2 is a similar
view showing the application of our inven-
tion in joining wires between the posts, and
Fig. 3 is a plan view.

A refers to the ratchet-bar, which is pro-
vided with upturned ends A' and A^2 , which
are provided with cam-levers a' and a^2 , the
serrated faces of which move over projecting
lugs or pins a . The upper edge of the bar
A is provided with ratchet-teeth, as shown,
and upon the under side thereof slides a bar
B, held in place by loops or straps b . This
sliding bar has one end apertured for attach-
ment thereto of a chain or flexible connection
C, which is made fast to one of the fence-
posts. The opposite end of the sliding bar is
bent outwardly and upwardly, and is pro-
vided with a cam-lever B' , adapted to move
over the projecting lug b' beneath the same.
This sliding bar carries adjacent to its up-

turned end a bail D, which is adapted to en-
gage the teeth in the bar A, and upon this
bar between the loops b is pivoted the op-
erating-lever E, carrying a pawl e .

It will be observed by reference to the draw-
ings that the construction of this device is
extremely simple and that it can be made by
an ordinary mechanic.

In practice we prefer to provide the ratchet-
teeth with flattened points, as shown, so that
the loops b can rest upon two or more of
the teeth and the sliding movement of the
same will not be interfered with.

In stretching a wire on the fence the chain
C is made fast to one of the intermediate
fence-posts, the wire having previously been
secured to the end post. The device is then
placed upon the wire and the cams a^2 and B'
thrown to be out of engagement with the wire,
but positioned to support the device thereon,
while the cam-lever a' is thrown to grip the
wire securely, and as the lever E is reciprocated the ratchet-bar A will be moved and
held by the bail D, and when the wire has
been sufficiently stretched it can be secured
to the post by a staple and the device moved
to the next post. In cases where the fence
has been constructed and the wires broken
the device is secured to an intermediate post,
as hereinbefore described, the cam-lever a'
thrown down, the lever a^2 thrown to grip one
of the ends of the broken wire, and the lever
 B' thrown to engage the other end, and as
the lever E is reciprocated the ends of the
wires will be brought together in order that
they may be readily joined.

In a device constructed as hereinbefore de-
scribed the parts coact, as the cam-levers
when not grasping the wire serve to support
the device in a horizontal position.

We are aware that prior to our invention it
has been proposed to provide a wire-stretcher
with a ratchet-bar and a sliding bar which
are moved upon each other by a lever carry-
ing a pawl; and we do not claim such con-
struction, broadly, as our invention; but

What we do claim as new, and desire to se-
cure by Letters Patent, is—

1. In a wire-stretcher, the combination,

with a ratchet-bar having upturned ends which carry means for securing the wire thereto, of a sliding bar carrying a lever and pawl and a locking-bail, one end of said sliding bar being upturned and provided with wire-clamping means, the opposite end having a flexible connection for securing the same to a post, substantially as set forth.

2. The combination, in a wire-stretcher, of a bar A, having ratchet-teeth and upturned ends with offsets, and cams located above said offsets, and a sliding bar secured to the ratchet-bar by means of loops and provided with a locking-bail, with a pivoted lever carrying a pawl for engaging the ratchet-teeth, and with wire-clamping means upon its upturned end, the opposite end thereof being adapted to be secured to a post, substantially as set forth.

3. In a wire-fence tightener, the combination of a bar A, having a series of ratchet-teeth with flattened points and upturned ends A' and A², having offsets, above which are pivoted cam-levers, with a sliding bar B, having loops *b b*, which embrace the bar A, a lever carrying a pawl *e*, a bail D, adapted to engage the ratchet-teeth, the said sliding bar being provided with an upturned end having an offset *b'*, and clamp-lever B', substantially as set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

MATHIAS J. RIDDER.
VALENTINE HARTMANN.

Witnesses:

R. F. SEEMANN,
C. BIEL.