

S. Perry,
Drag Sarr.

N^o 49,917.

Patented Sep. 12, 1865.

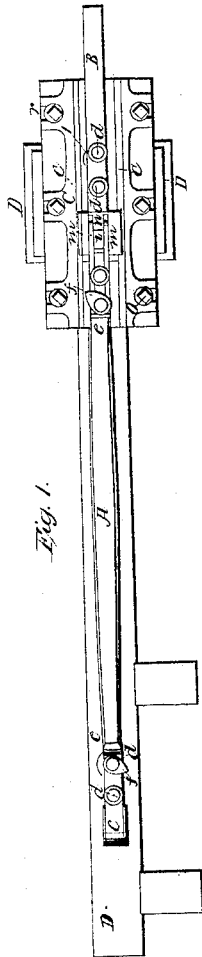


Fig. 1.

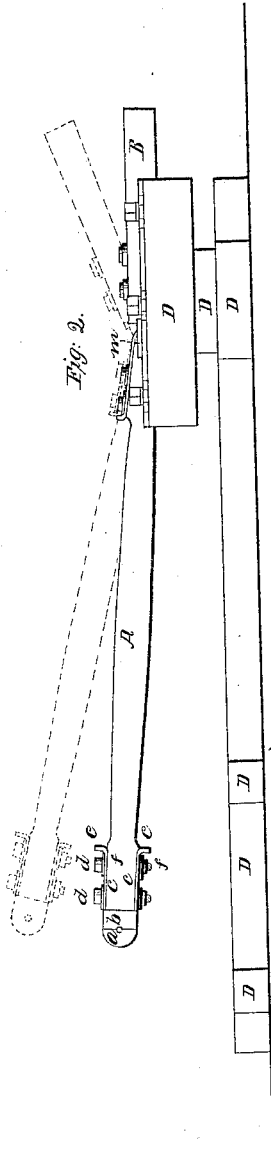


Fig. 2.

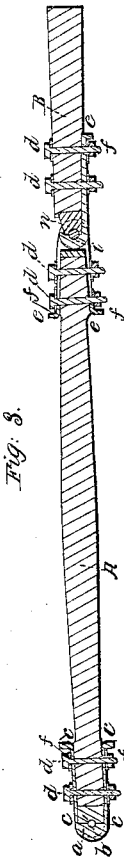


Fig. 3.

Witnesses:

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UNITED STATES PATENT OFFICE.

STUART PERRY, OF NEWPORT, NEW YORK.

IMPROVEMENT IN SAW-MILLS.

Specification forming part of Letters Patent No. 49,917, dated September 12, 1865.

To all whom it may concern:

Be it known that I, STUART PERRY, of New-
port, in the county of Herkimer and State of
New York, have invented certain new and use-
ful improvements in pitmen or connecting-rods
and cross-heads used therewith, and which,
though designed for a sawing attachment for
horse-powers, may be used in and applied to any
other machinery where such things are ordina-
rily introduced or required; and I do hereby de-
clare the following to be a full, clear, and exact
description of the same, reference being had
to the accompanying drawings, making a part
of this specification, in which—

Figure 1 represents a top plan of the appa-
ratus. Fig. 2 represents a side elevation with
the pitman and connecting in different work-
ing positions. Fig. 3 represents a longitudi-
nal section through the pitman and connecting-
rod to show their hinged connection.

My invention consists, first, in the mode of
constructing and tightening up the joints in
the metallic bearings or boxes on the ends of
the pitman or connecting-rod, so as to prevent
all jar, shackle, or back lash in the connec-
tions.

It further consists in a hook-connection be-
tween the metallic heads of a pitman and con-
necting-rod, which is readily connected and dis-
connected and very secure in its operation.

It further consists in combining a cross-head
with the joint between the pitman and connect-
ing-rod, so that each may have a hinged mo-
tion independent of the other.

To enable others skilled in the art to make
and use my invention, I will proceed to describe
the same in connection with the drawings.

The words "pitman" and "connecting-rod"
are used interchangeably in mechanics, and
generally are applied to the piece or part be-
tween the motor and the thing moved. For
the purpose of explaining my invention, I shall
call the piece A a "connecting-rod," and the
part B a "pitman," as it may be connected di-
rectly to what is termed a "drag-saw."

On the end of the connecting-rod next the
jack or power there is a metallic head com-
posed of two parts, *a b*, with a hole for the wrist-
pin or crank by which it is driven. A strap,
c, goes around these two parts *a b*, and is bolted
to the connecting-rod A by bolts *d d*. The ends
of the strap are turned up, as at *e*, so as to form

a shoulder, against which a cam-shaped washer,
f, (one above and one below, if desirable,) may
press or be drawn or driven for the purpose of
taking up all the wear or shackle in the wrist-
pin head, the bolt-holes through the strap be-
ing elongated or slotted to allow the strap to
be drawn up, and when adjusted the nuts are
run down tight and hold the cam-washer and
strap in place. The opposite end of the con-
necting-rod may be similarly furnished with a
metallic head and similarly adjusted or tight-
ened up.

The pitman B has a metallic head upon it of
somewhat different construction, but suscep-
tible of the same adjustment. It is composed
of a hook, *i*, and a tongue-piece, *n*, separated
therefrom, but which, when in place, surround,
or nearly so, the pivot of the joint. The part *i*
in this case can be tightened up by a cam-washer,
slot, and bolt, in the same way as that above
described.

To the pivot upon which the rod and pitman
or saw-arm vibrate I connect the pieces *m*, one
upon each side of the joint, which pieces, with
their connection or pivot, form the cross-head
which traverses on the ways C C. These ways
are so made as to be adjusted by means of the
bolts *o* and slots *r*.

D represents a frame or timbers upon which
the apparatus is supported.

Having thus fully described my invention,
what I claim therein is—

1. The use of the strap and shoulder thereon,
in connection with a cam nut or washer, for
tightening up the box or bearing of pitman
or connecting-rod heads, substantially as de-
scribed.

2. The joint between the pitman or connect-
ing-rod and saw-arm, composed of the metal
head and strap and the hook and tongue, unit-
ing with a common pivot, and made adjustable
substantially as herein described and repre-
sented.

3. Uniting the cross-head to or with the joint
between pitman and saw-arm, so that either
may have motion independent of the other, sub-
stantially as described.

STUART PERRY.

Witnesses:

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