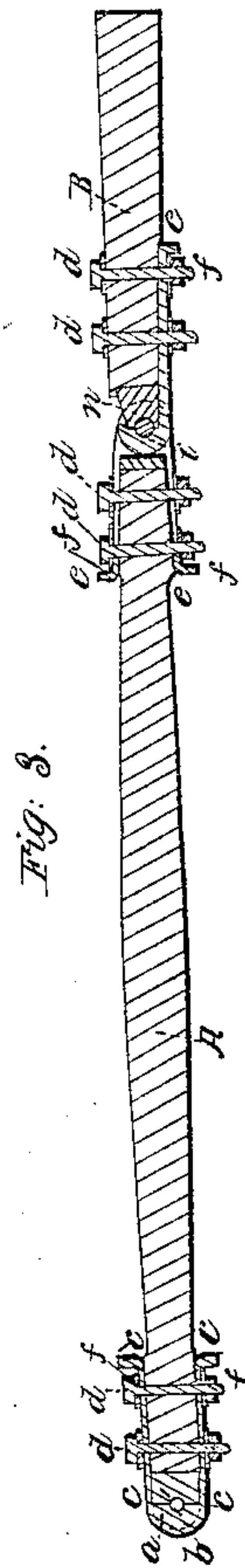
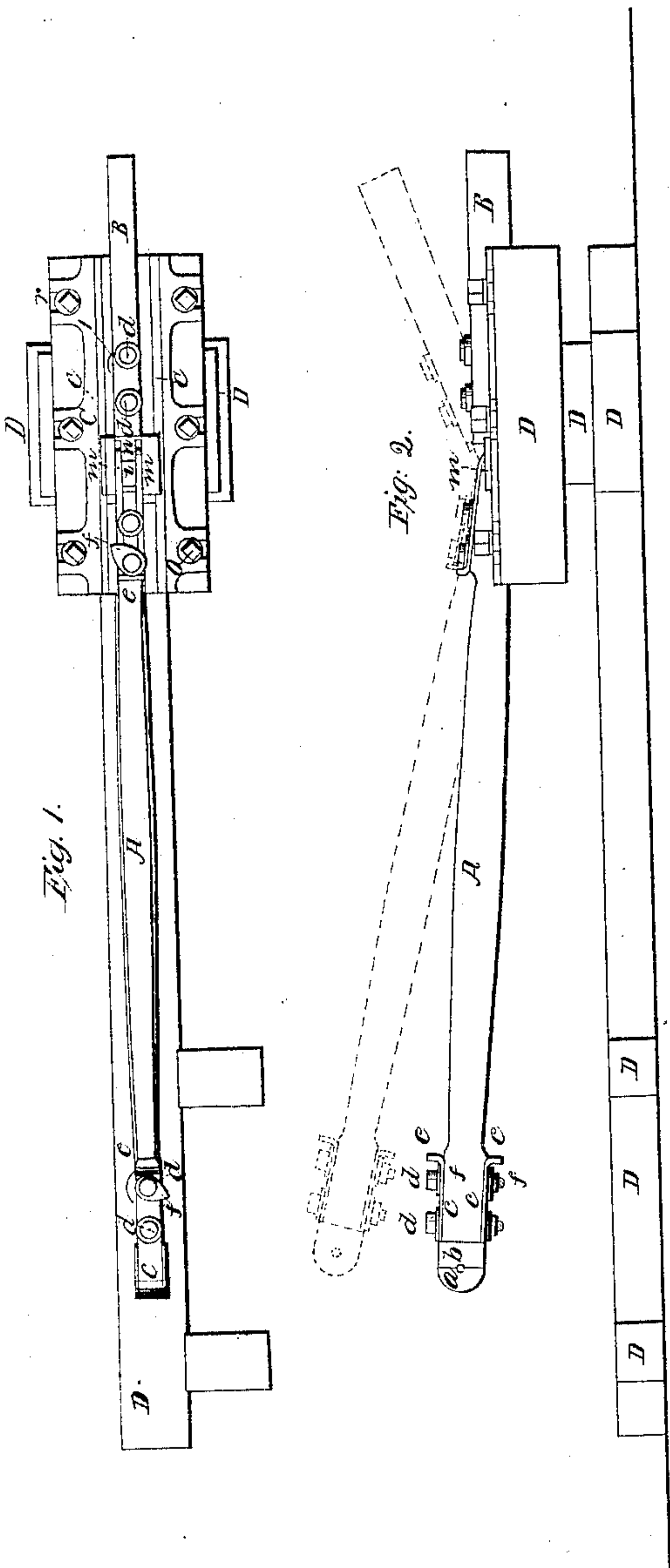


*S. Perry,  
Drag Sarr.*

*N<sup>o</sup> 49,917.*

*Patented Sep. 12, 1865.*



*Witnesses:*

*John D. Patten.  
A. H. Hulbom*

*Inventor:*

*Stuart Perry.  
A. B. Stoughton,  
attorney.*

# 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:

JOHN G. BARRY,  
FRED E. ANGELL.