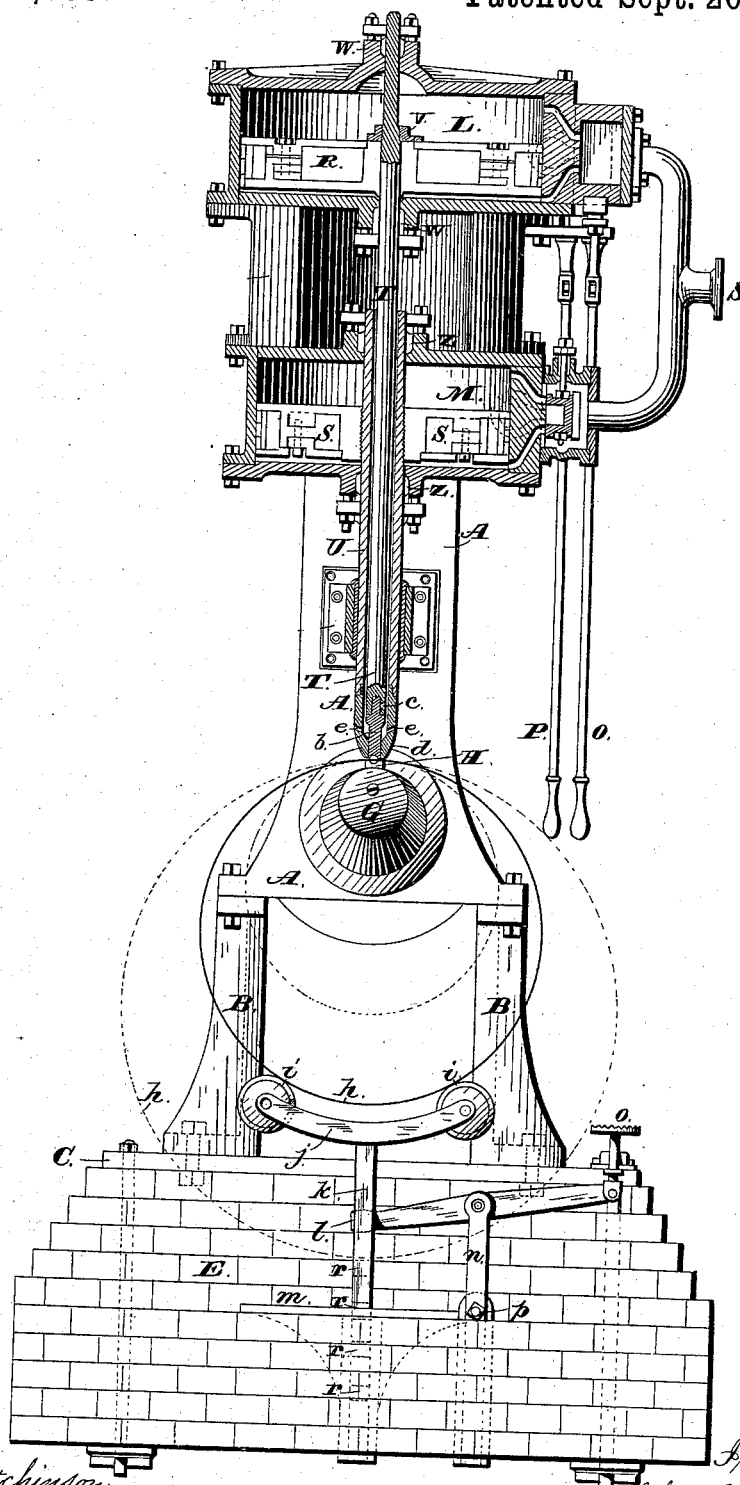


(No Model.)

C. G. JOHNSEN.
WORK SUPPORTING FRAME.

No. 265,093.

Patented Sept. 26, 1882.



Witnesses,
Jas. C. Hutchinson,
Norton Coombs

Inventor,
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UNITED STATES PATENT OFFICE.

CHARLES G. JOHNSEN, OF NEW ORLEANS, LOUISIANA.

WORK-SUPPORTING FRAME.

SPECIFICATION forming part of Letters Patent No. 265,093, dated September 26, 1882.

Application filed March 28, 1882. (No model.)

To all whom it may concern:

Be it known that I, CHARLES G. JOHNSEN, a citizen of the United States, residing at New Orleans, in the parish of Orleans and State of Louisiana, have invented new and useful Improvements in Riveting-Machines, of which the following is a specification.

This invention relates to certain improvements in the work-supporting frame of riveting-machines, its object being to provide devices for raising the boiler-ring from the lower die, so as to admit of the work being shifted and rivets inserted in the holes; and the invention consists, first, in the combination of a horn or anvil and the riveting-dies with a work-supporting frame provided with rollers on which the work rests, and treadle mechanism for raising and lowering the work-supporting frame, as hereinafter described; second, in the combination, with a horn or anvil and riveting-dies, of a work-supporting frame composed of arms carrying rollers on which the work rests, a vertical post connected with the roller-carrying arms, and a pivoted lever connected with the post at one end and at the other end connected with a treadle, as herein-after set forth.

In the accompanying drawing, which represents a sectional elevation of a riveting-machine with my improved work-supporting frame applied thereto, A indicates the body of the machine, bolted to the supports B B, which in turn are bolted to the base-plate C.

G is the horn or anvil, in the upper side of which is fitted the die H.

L and M are two steam-cylinders, having each a steam-chest and slide-valves, all corresponding to the common steam-engine, the said valves being operated by hand-levers O P.

T is a piston-rod inserted in the piston R, and secured thereto by the nut V. This piston-rod passes out of both ends of the cylinder through packing-boxes W, and carries at its lower end a die *b*, made fast by a set-screw, *c*. The end of the die *b* is countersunk to the form of a rivet-head, and when brought down upon the point of the heated rivet it upsets a head upon it. The rod U of piston S is a pipe, through which the piston-rod T reciprocates freely, said rod U being firmly secured into piston S.

e e are vent-holes in rod U to allow free circulation of air.

The above description of riveting-machine is not claimed by me, as it forms no part of my invention, which consists essentially of the work-supporting frame, which I will now proceed to describe.

k is a post or upright sliding vertically in the fixed support *m*, which is rigidly secured in the base portion or bed E of the machine. This post is provided with several mortised seats, *r*, adapted to receive the end of a lever, *l*, so that it may be raised or lowered, as desired. This lever *l* is pivoted or fulcrumed in a post, *n*, which is held in place on the support *m* by means of the screw *p*.

o is a foot-treadle attached to the lever *l* at the end opposite to that which engages the mortises in the post *k*. At the upper portion or end of post *k* is rigidly secured, at its center, a cross piece forming arms carrying rollers *i*, upon which the boiler or other work to be riveted rests and is supported.

The operation of my invention is as follows: The boiler or boiler-ring to be riveted is placed upon the rollers *i i* of the work-support, which should be so adjusted that the inner part of the upper portion of the boiler-ring shall rest upon the die H. This adjustment can be effected by means of the slots *r* of the post *k* engaging with the support *m*. Pressure is now applied to the foot-treadle *o*, which, through the intermediary of the lever *l*, will raise the post *k*, carrying the arms *j* and rollers *i*, and consequently the work supported on the rollers a sufficient distance from the die H to allow a rivet to be inserted in the hole which has been previously punched. Pressure is now relieved from the foot-treadle and the boiler allowed to settle down on the die H, into which the head of the inserted rivet fits, and the piston T operated by means of the valve-rods to upset and head the rivet. The above operation is repeated until the necessary number of rivets have been inserted and headed, the rollers *i i* readily allowing the boiler or other work to be shifted, so that all portions of it may be presented to the action of the riveting-dies.

Having thus described my invention, what I claim is—

1. In a riveting-machine, the combination,

with the horn or anvil and the riveting-dies, of
a work-supporting frame composed of a ver-
tically-movable frame provided with rollers on
which the work rests, and treadle mechanism
5 for raising and lowering the work-supporting
frame, substantially as described.

2. In a riveting-machine, the combination,
with the horn or anvil and the riveting-dies,
of a work-supporting frame composed of the
10 arms *j*, carrying rollers *i*, on which the work
rests, a vertical post, *k*, connected with the

roller-carrying arms, and a pivoted lever, *l*,
connected with the post at one end and the
other end connected with a treadle, *o*, substan-
tially as described. 15

In testimony whereof I have hereunto set my
hand in the presence of two subscribing wit-
nesses.

CHAS. G. JOHNSEN.

Witnesses:

J. CHABAUD,
WM. SURGO.