

(No Model.)

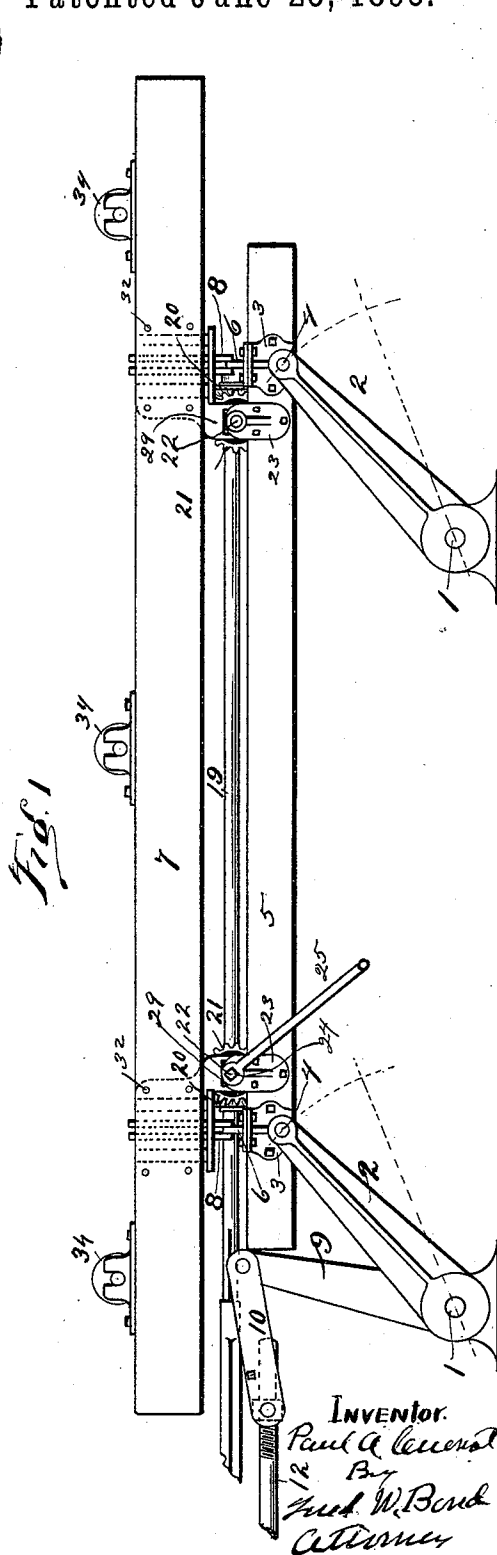
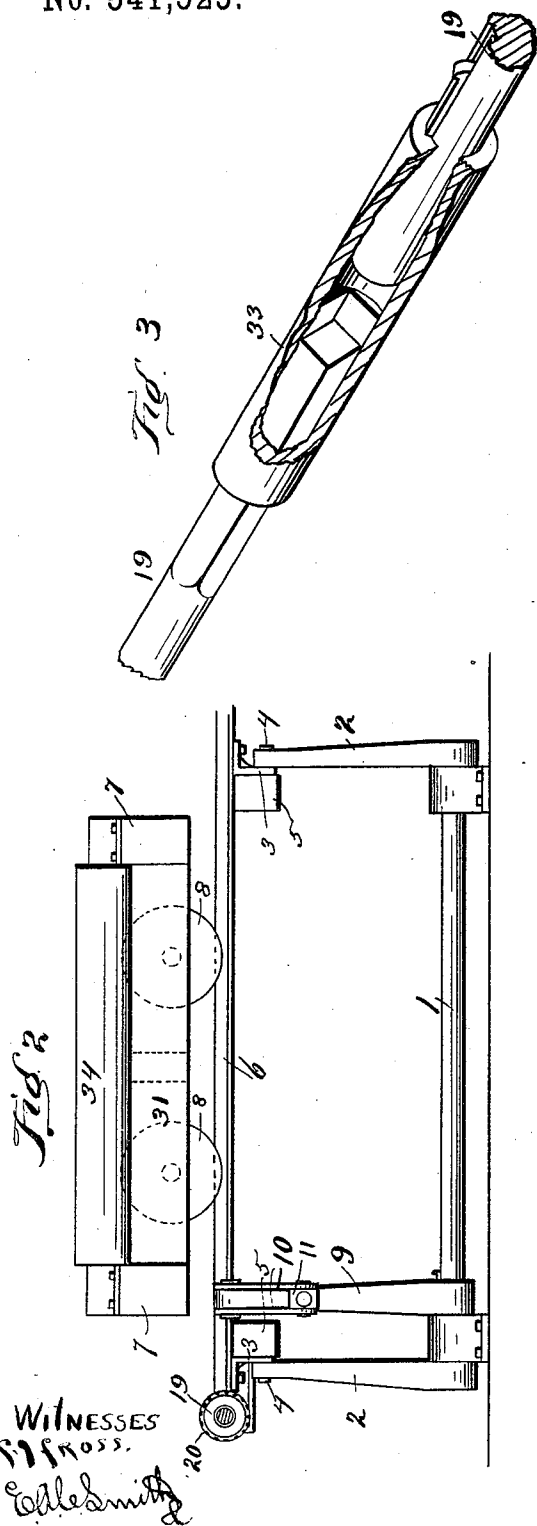
3 Sheets—Sheet 1.

P. A. CUENOT.

ADJUSTABLE TABLE FOR RIVETING MACHINES.

No. 541,525.

Patented June 25, 1895.



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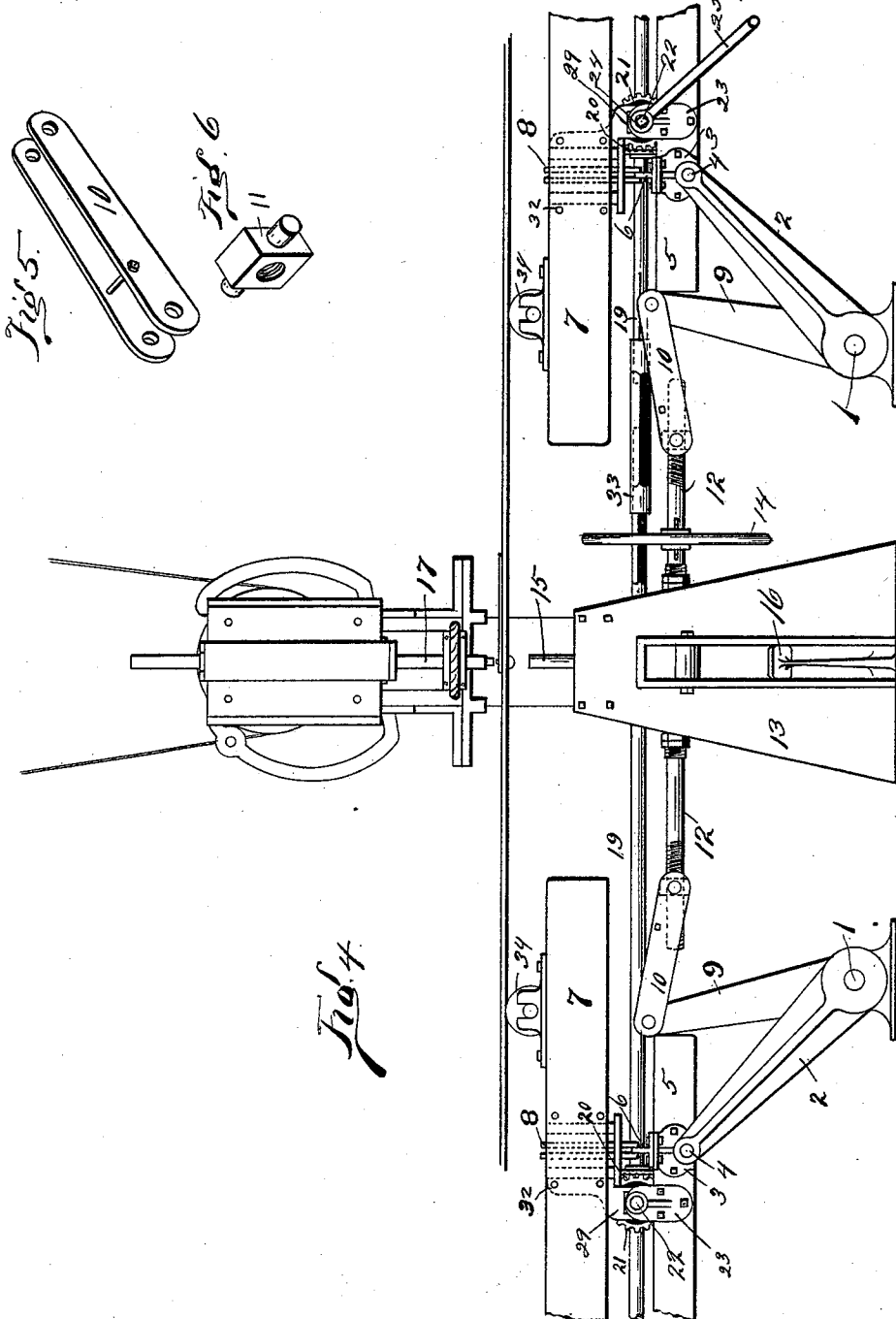
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WITNESSES
C. J. ROSS.
Edw. Smith

INVENTOR.
Paul A. Cuenot
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Attorney.

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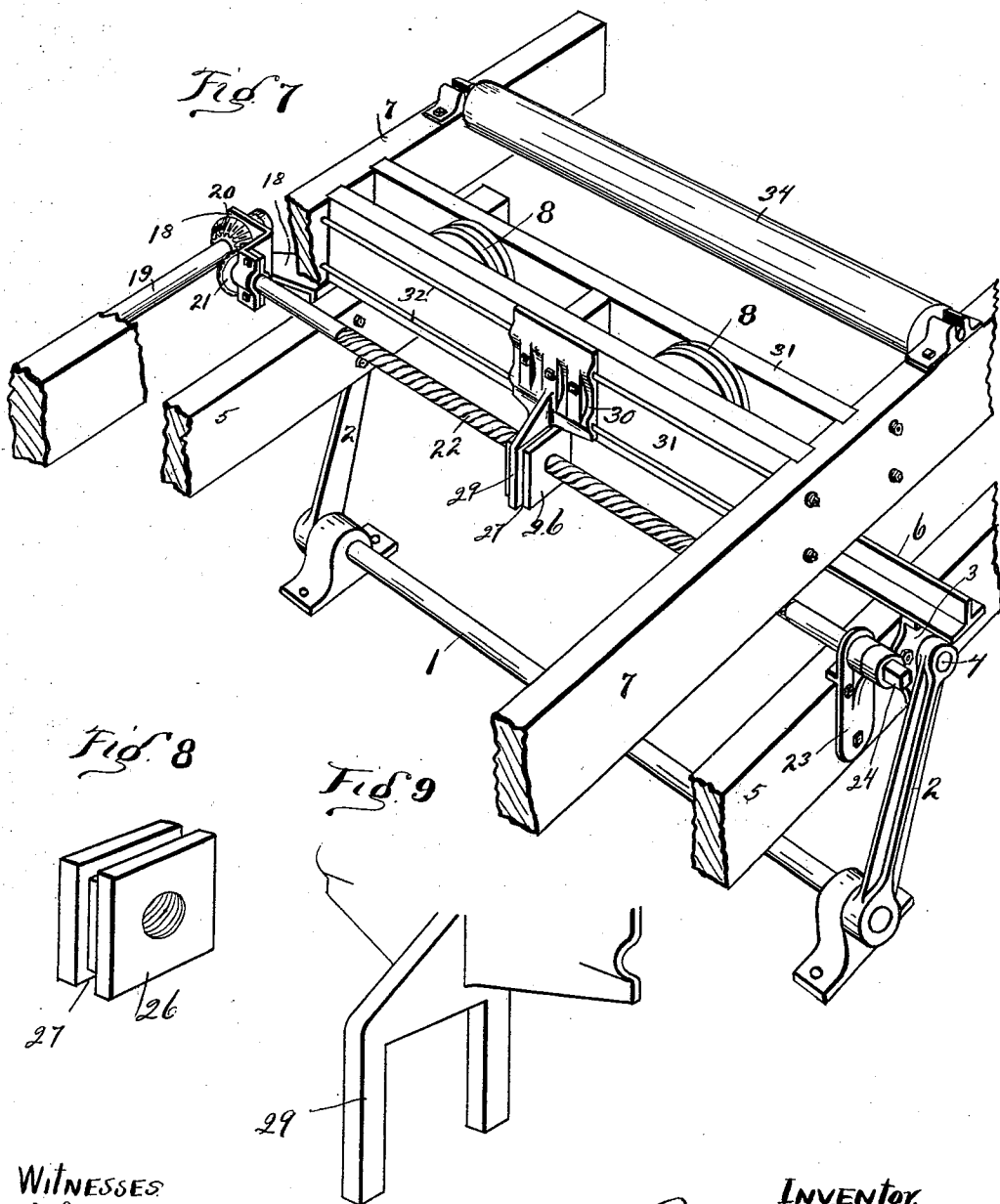
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UNITED STATES PATENT OFFICE.

PAUL A. CUENOT, OF CANTON, OHIO.

ADJUSTABLE TABLE FOR RIVETING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 541,525, dated June 25, 1895.

Application filed September 27, 1894. Serial No. 524,252. (No model.)

To all whom it may concern:

Be it known that I, PAUL A. CUENOT, a citizen of the United States, residing at Canton, in the county of Stark and State of Ohio, have
5 invented certain new and useful Improvements in Adjustable Tables for Riveting-Machines; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the figures of reference marked thereon, in which—

Figure 1 is a side elevation of one of the table-sections. Fig. 2 is an end view of one
15 of the table-sections. Fig. 3 is a view showing the coupling for the table-sections connecting-shaft. Fig. 4 is a side elevation showing portions of the table-sections and illustrating a riveting-machine properly located
20 with reference to the table-sections. Fig. 5 is a detached view of one of the connecting-clevises. Fig. 6 is a detached view of one of the screw-threaded nuts designed and calculated to be attached to a clevis. Fig. 7 is a
25 perspective view showing a portion of one of the table-sections. Fig. 8 is a detached view of one of the grooved nuts. Fig. 9 is a view of the yoke designed to embrace the flanged or grooved nut.

30 The present invention has relation to an adjustable table for riveting machines, and it consists in the different parts and combination of parts hereinafter described and particularly pointed out in the claims.

35 Similar numbers indicate corresponding parts in all of the figures of the drawings.

In the accompanying drawings, 1 represents the rock-shafts, which are located below the table proper, and may be journaled to suitable bases or sills as desired, inasmuch as the
40 only object is to provide suitable foundations for the various rock-shafts, and locating said foundations so as to hold the rock-shafts in proper position with reference to each other, and the different parts of the table.

45 To the rock-shafts 1, are securely attached in any convenient and well known manner, the arms 2, which arms are preferably located as shown in the drawings. The top or upper
50 ends of the arms are pivotally attached to the brackets 3, by means of the pins 4, said brackets 3, being securely attached to the parallel

bars 5, said parallel bars being of any desired length, reference being had to the length of the table designed to be constructed. Upon
55 the top or upper edges of the parallel bars are located the track-bars 6, which track-bars are held in proper position by means of suitable bolts or rivets. Upon the track bars 6, are mounted the frames 7, which frames travel
60 back and forth laterally; the frames being supported upon the grooved traveling wheels 8.

To the inner rock-shafts, are attached the arms 9, which arms are preferably located as illustrated in Figs. 1, 2 and 4, and to the top or
65 upper ends of the arms 9 are pivotally attached the clevises 10, to the free ends of which are pivotally attached the screw-threaded nuts 11, said screw-threaded nuts being located
70 upon the right and left hand screw-threaded shaft 12, which right and left hand screw-threaded shaft is properly journaled to the base 13, and is so attached that it cannot move
endwise as it is rotated by means of the hand
75 wheel 14 or its equivalent.

The base 13 is provided with the anvil 15, which anvil is moved up and down by means of the lever 16 or its equivalent. Directly
above the anvil 15 is located the reciprocating hammer 17, which hammer is operated in the
80 ordinary manner. The base 13 together with its different parts, and the reciprocating hammer 17, and its different parts form no particular part of the present invention, except
85 that said parts are used in connection with the present invention; but it will be understood that so far as my improved table is concerned it can be used without reference to any
particular construction of riveting machines, except that the anvil forming a part of the
90 riveting machine should be so adjusted that it can be held in an elevated position, and lowered when the work is moved in either direction as hereinafter described.

When it is desired to elevate the parallel
95 bars 5 together with the different parts attached to said bars, and carried by said bars, the right and left hand screw-threaded shaft is rotated in the direction that will bring the
clevises 10 toward each other, which movement carries or brings the upper ends of the
100 arms 9 toward each other and elevates the upper portions of the arms 2, by means of the rock-shafts 1, and holds the bars 5 together

with their different attachments at the desired point of elevation.

When it is desired to lower the bars 5, together with their different parts and attachments, the right and left hand screw-threaded shaft is rotated in the opposite direction from the direction to elevate, thereby permitting the arms 2 together with the parts carried by said arms to descend by gravity. It will be understood that the arms 2 should be so adjusted that the tables proper can be elevated to the desired height without bringing the arms 2 into a vertical position, thereby permitting the tables to be lowered by gravity.

To the parallel bars 5, are attached suitable brackets 18, which brackets are provided with suitable bearings for the shafts 19, to which shafts are attached the beveled wheels 20, said beveled wheels being located so that they will mesh with the beveled wheels 21, said beveled wheels 21, being securely attached to the screw-threaded cross shafts 22, which screw-threaded cross shafts are properly journaled to the brackets 18 and 23.

For the purpose of communicating rotary motion to the screw-threaded shafts 22, they are provided with the angular extension or part 24, which receives the crank 25, said crank being so attached that it can be easily removed and applied to the different screw-threaded shafts, as it will be understood that the different screw-threaded shafts rotate in unison by reason of the gear wheels 20 and 21.

Upon the screw-threaded shafts 22 are located the screw-threaded nuts 26, which screw-threaded nuts are provided with the grooves 27, said grooves being for the purpose of receiving the yoke 29, which yoke is securely attached or formed integral with the brackets 30, which brackets are securely attached to the frame 7, by means of the cross piece 31 or its equivalent.

It will be understood that as the screw-threaded shafts 22, are rotated, the screw-threaded nuts 26, being held against rotation by the yoke 29, will travel upon the screw-threaded shafts 22, thereby moving the frames 7 together with their different parts laterally, and in the direction corresponding with the direction of rotation of the screw-threaded shafts 22.

For the purpose of securely tying the different parts of the frames 7, clamping bolts, such as 32 are used, which clamping bolts may be located as shown in Fig. 7, or they may be differently located, as it is immaterial as to the location of the clamping bolts except that they should be so located that they will not interfere with any of the different parts of the frames.

For the purpose of providing for any variation of distance between the two frames 7,

and their supporting devices as they are elevated and lowered, the shafts 19 are coupled together about midway between the two frames 7, by means of the sleeve 33, which sleeve is securely attached to one of the shafts 19, and is loosely attached to the other shaft 19, so that the inner ends of the shafts 19 can come and go so as to compensate for any variations as to distance between the frames 7, and their supporting devices.

For the purpose of providing for easily moving the work located upon the frames 7, rollers 34 are provided which rollers may be located as illustrated in the drawings or they may be differently located if desired.

I have described the present invention as applied to tables for riveting machines, and have illustrated a riveting machine placed in proper position with reference to the table proper, but I do not desire to confine the present invention to riveting machines only, as it will be understood that the invention can be applied for other purposes, for instance drilling machines, inasmuch as the work to be drilled is moved and brought into position in substantially the same manner that work to be riveted is operated upon.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination of rock-shafts provided with supporting arms carrying parallel bars, the arms 9 fixed to the rock-shafts 1, the clevises 10 pivotally attached to the arms 9, and provided with screw-threaded nuts, the right and left hand screw-threaded shaft 12, and means for rotating the screw-threaded shaft 12, substantially as and for the purpose specified.

2. The combination of a riveting machine, a pair of parallel bars movable vertically, laterally moving frames supported by the vertically moving bars, and means for moving the frame supporting bars, substantially as and for the purpose specified.

3. The combination of fixed rock-shafts provided with supporting arms, carrying parallel bars, laterally moving frames provided with rollers, an expansible shaft connected to the parallel bars 5, and vertically movable with said bars, the right and left hand screw-threaded shaft 12 connected to clevises by screw-threaded nuts and arms connecting the clevises and the fixed rock-shafts, substantially as and for the purpose specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

PAUL A. CUENOT.

Witnesses:

F. W. BOND,
E. A. C. SMITH.