

W. O. BESAW.

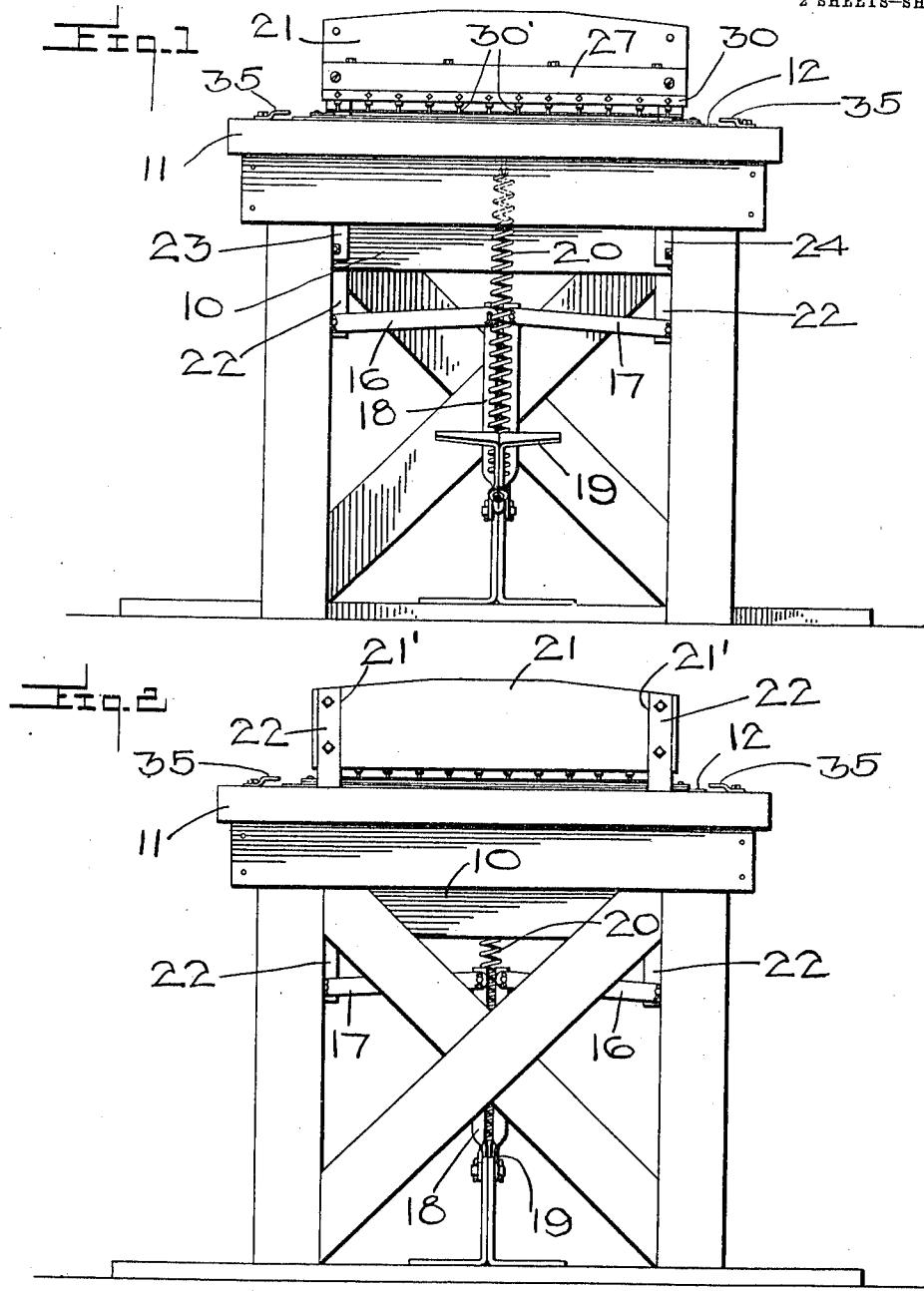
GANG PUNCH.

APPLICATION FILED AUG. 13, 1910.

984,530.

Patented Feb. 21, 1911.

2 SHEETS—SHEET 1.



Inventor
Willie O. Besaw

Witnesses

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Ernest H. Riley

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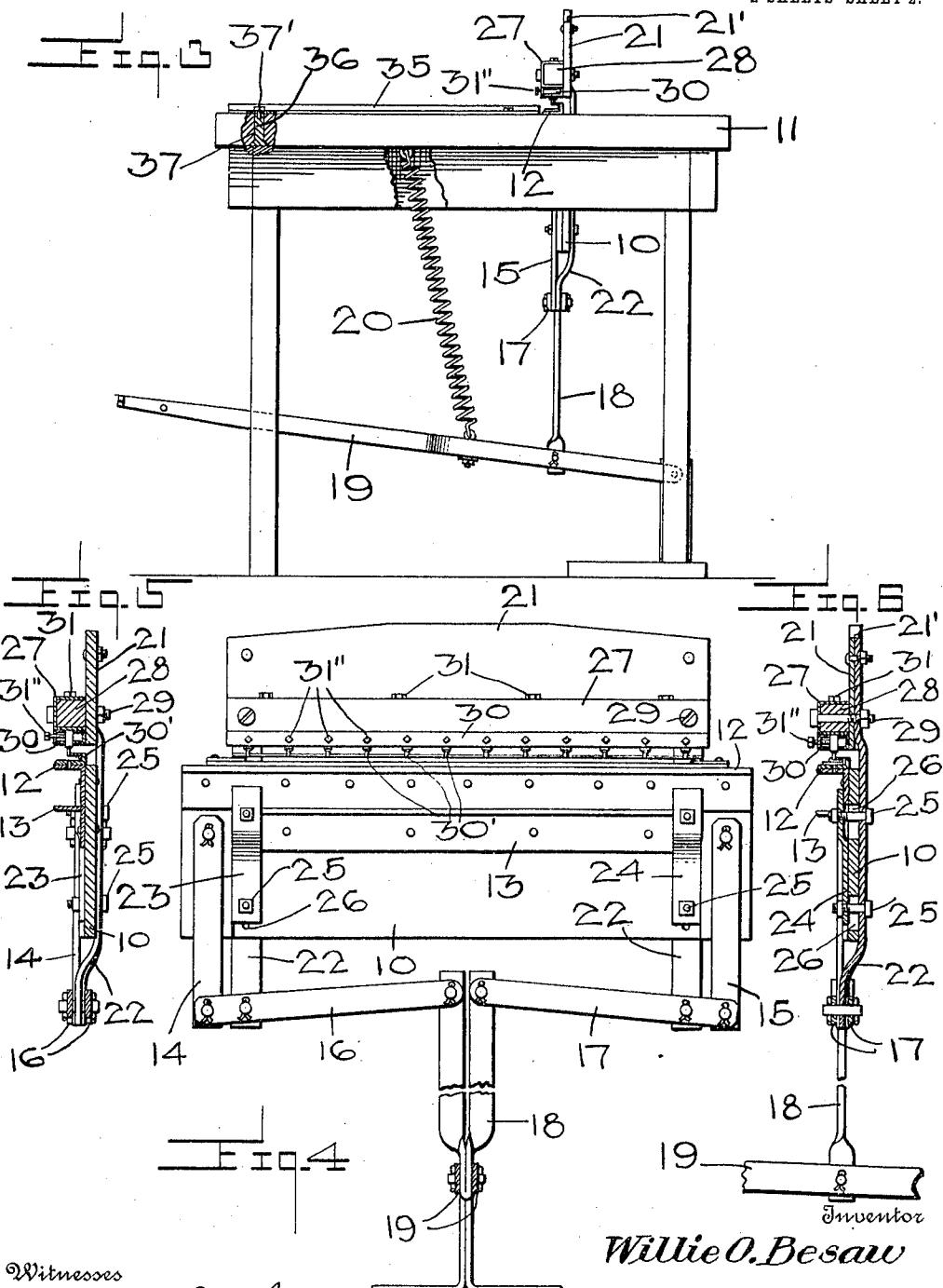
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UNITED STATES PATENT OFFICE.

WILLIE O. BESAW, OF REEDLEY, CALIFORNIA.

GANG-PUNCH.

984,530.

Specification of Letters Patent. Patented Feb. 21, 1911.

Application filed August 13, 1910. Serial No. 576,988.

To all whom it may concern:

Be it known that I, WILLIE O. BESAW, a citizen of the United States, residing at Reedley, in the county of Fresno and State 5 of California, have invented certain new and useful Improvements in Gang-Punches, of which the following is a specification.

This invention relates to an improvement in gang punches, the object of said invention 10 being to provide a machine of this character which will effectually punch a series of spaced holes at one operation of the machine.

Another object of the invention is to provide means for conveniently attaching and 15 removing the punching members.

A further object of the invention is to provide means for readily attaching the machine to a suitable support.

20 A still further object of the invention is to so position and arrange the punch-actuating mechanism that the same may be easily and conveniently operated.

In the drawings: Figure 1 is a front elevation of the machine, Fig. 2 is a rear elevation, Fig. 3 an end view, Fig. 4 a detailed view showing the manner of connecting the actuating rods to the punch-carrying member. Fig. 5 a detailed sectional view showing the manner of positioning the punches, 25 and, Fig. 6 a view of one of the guide members.

In the drawings: 10 designates a plate which extends through the supporting table 35 11. Arranged upon said plate are members 12 and 13, the member 12 engaging the upper surface of the supporting table, and the member 13 engaging the lower surface of the supporting table. Connected to 40 either end of the plate 10 are arms 14 and 15 which extend downwardly. These arms are adapted to support the pivotally connected links 16 and 17, each of which is connected to the forked member 18, which in 45 turn is connected to the pivotally supported treadle 19, said treadle being normally held in a raised position by the spring 20 which is secured to the support 11. A plate 21 is arranged above the support 11, and in alignment with the plate 10. This plate is connected by means of arms 22 to the links 16 and 17, said arms 22 being provided with a curved portion which extends around the base of the plate 10, the upper end portions 50 of said rod being dove-tailed to enter the dove-tailed slot 21' in the plate 21, said end

portions being bolted to said plate. Guide bars 23 and 24 are adapted to rest upon the face of the plate 10, said bars being provided with the bolts 25 which work in slots 60 26 in said plate, the end portions of said bars being bolted to the arms 22, the connecting bolts passing through the plate 10, said bolts being adapted to limit the upward movement of the arms 22. 65

Arranged upon the plate 21 is a U-shaped member 27, said member being spaced from said plate by a block 28, screws 29 passing through said member and block for securing the member to the plate. The U-shaped 70 member 27 is adapted to support two L-shaped members 30, said L-shaped members being securely positioned by means of screws 31. The L-shaped members 30 are adapted to support the punches 30', each of which 75 may be removed from their supporting member by releasing a retaining screw 31".

It will be seen from the foregoing that as the treadle 19 is depressed, the links 16 and 17 will carry the punch-supporting plate 21 80 downward bringing the punch members in contact with the material to be punched which rests upon the support 11, and which extend beneath the punch members.

Arranged upon the table 11 are adjustable 85 guides 35 which are adapted to engage the material, said guides being provided with extensions 36 which are arranged to work in slots 37, screws 37' being provided for holding said guides in contact with the table 11 90 when the same have been adjusted to engage the edge portion of the material. These guides are adapted to handle small pieces of material which cannot be conveniently held in place by hand. 95

The many advantages of a machine of this character will be clearly apparent, the structure being one which may be readily and quickly assembled. It will also be noted that all of the parts may be manufactured 100 cheaply and conveniently.

What is claimed is:

1. A gang punch consisting of a support, a plate arranged to extend through said support, said plate being provided with offsets adapted to engage both faces of the support, arms arranged upon said plate, links connecting said arms to the spring-pressed treadle member, curved arms connected to said links, a plate arranged upon the end portions of said arms, said end portions being dove-tailed to enter dove-tailed slots 110

formed in said plate, guide bars bolted to said curved arms, a U-shaped supporting member carried by said plate, a plurality of L-shaped members supported by the first-mentioned member, said members being adapted to support a plurality of punches, and a pair of slidably arranged work-supporting guides adapted to hold the material to be punched in position.

10 2. A gang punch consisting of a support, a plate arranged to extend through said support, said plate being provided with offsets adapted to engage both faces of the support, arms arranged upon said plate, links connecting said arms to a spring-pressed treadle member, curved arms connected to said links a plate supported by said arms, a U-shaped

member supported by said plate, said U-shaped member being adapted to embrace a block of wood, a plurality of L-shaped members arranged upon the under face of the U-shaped member, a plurality of punches supported between said L-shaped members, said punches being held against displacement by set screws passing through one of said members and a plurality of adjustable work-supporting members.

In testimony whereof I affix my signature, in the presence of two witnesses.

WILLIE O. BESAW.

Witnesses:

M. J. WICKSTROM,
A. FERN SAILE.