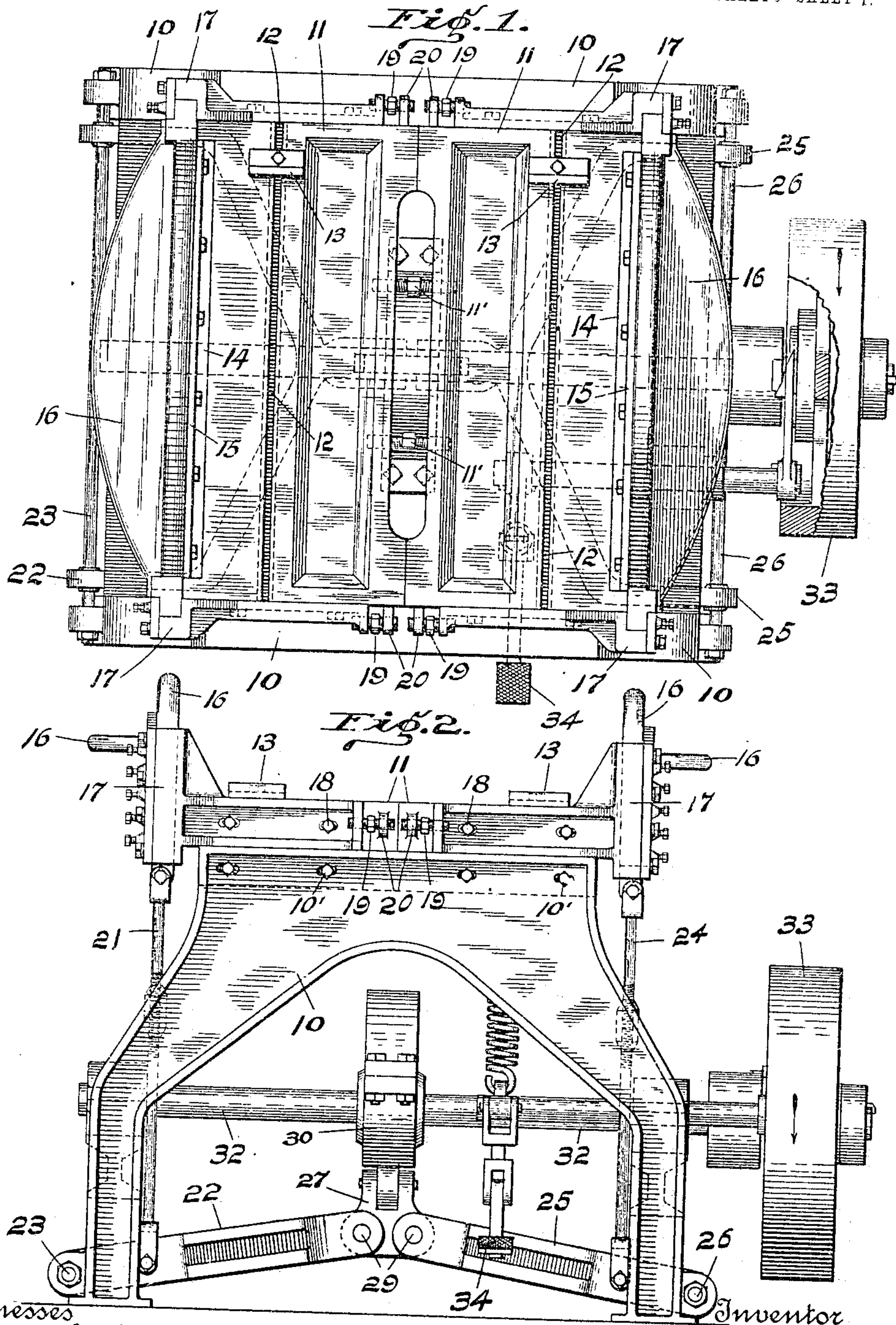


No. 819,201.

PATENTED MAY 1, 1906.

C. W. BENNETT.
RESQUARING SHEARS.
APPLICATION FILED JAN. 2, 1906.

2 SHEETS—SHEET 1.



Witnesses
Frank A. Fahle
Thomas W. McMeans

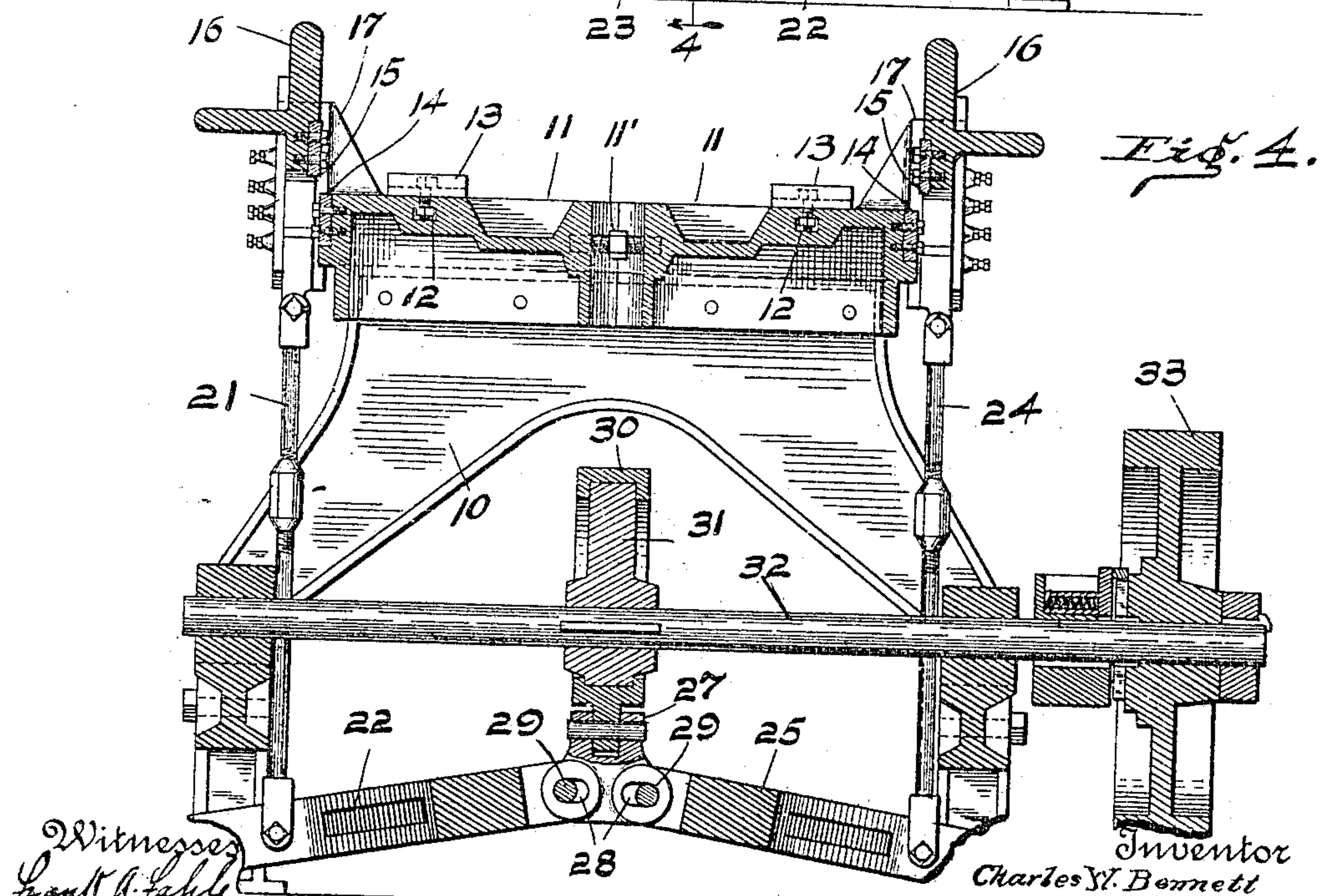
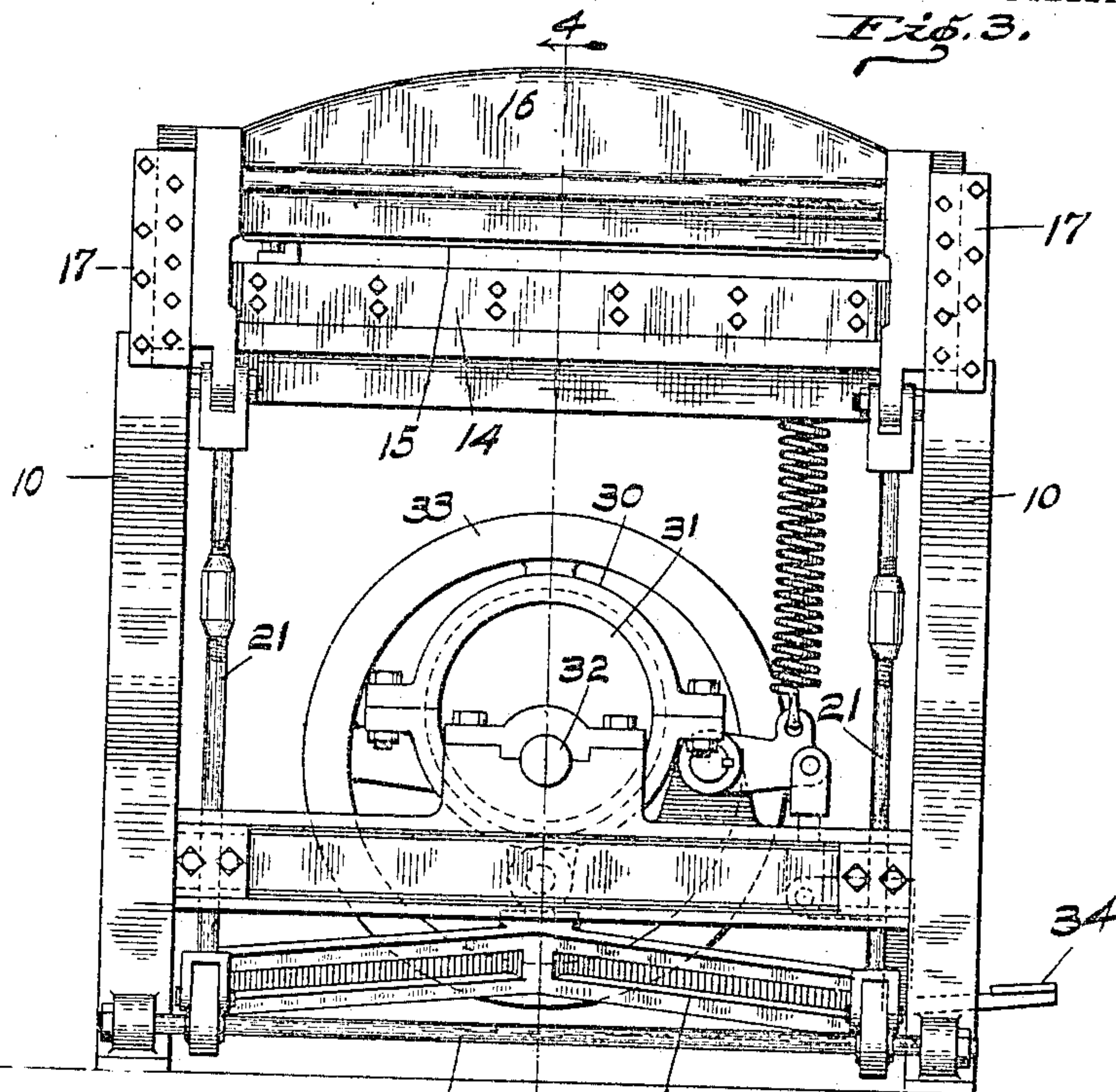
Inventor
Charles W. Bennett
BY
Bradford Hood
Attorneys

No. 819,201.

PATENTED MAY 1, 1906.

C. W. BENNETT.
RESQUARING SHEARS.
APPLICATION FILED JAN. 2, 1906.

2 SHEETS—SHEET 2.



Witnesses
Frank H. Fable
Thomas H. McMeans

Inventor
Charles W. Bennett

BY
Bradford & Hood.
Attorneys

UNITED STATES PATENT OFFICE.

CHARLES W. BENNETT, OF ELWOOD, INDIANA, ASSIGNOR TO AMERICAN SHEET & TIN PLATE COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW JERSEY.

RESQUARING-SHEARS.

No. 819,201.

Specification of Letters Patent.

Patented May 1, 1906.

Application filed January 2, 1906. Serial No. 294,146.

To all whom it may concern:

Be it known that I, CHARLES W. BENNETT, a citizen of the United States, residing at Elwood, in the county of Madison and State of Indiana, have invented certain new and useful Improvements in Resquaring-Shears, of which the following is a specification.

In the manufacture of sheet-metal sheets which are to be connected to form strips of considerable length it is essential that opposite edges of said sheets be trimmed upon exactly parallel lines which are accurately at right angles to an adjacent edge.

The object of my present invention is to provide a machine by means of which such sheets may be trimmed accurately and rapidly.

The accompanying drawings illustrate my invention.

Figure 1 is a plan of a machine embodying my invention; Fig. 2, a side elevation; Fig. 3, an end elevation; Fig. 4, a section on line 4-4 of Fig. 3.

In the drawings, 10 10 indicate a pair of suitable supporting-legs, to the upper ends of which are secured a pair of bed-plates 11 11, which are adjustably connected together by double screws 11' 11' to form a work-table upon which the sheets are to be laid. The bed-plates 11 are attached to the legs 10 by means of bolts 10', which pass through slots in the legs. Each bed-plate 11 is provided with a slot 12, by means of which an adjustable gage 13 may be accurately positioned thereon. Secured to the outer edge of each bed-plate 11 is a shear-blade 14, which is adapted to coact with a shear-blade 15, carried by a suitable cross-head 16. Each cross-head 16 is supported at its ends in a guide-bracket 17, which bracket is attached to one end of bed-plate 11 by means of bolts 18. Each bracket 17 is adjustable on the bed-plate 11 on a line at right angles to the shear-blade 14 by means of a suitable adjusting-screw 19, one end of which is threaded into the bracket 17 and the other end of which is threaded into a lug 20, carried by the bed-plate, the arrangement being such that by accurate adjustment of the brackets 17 a shear-blade 15 may be brought into accurate correlation with the corresponding shear-blade 14. One of the cross-heads 16 is connected by a pair of links 21 to a lever 22, piv-

oted at 23 to the legs 10, and the other cross-head 16 is connected by similar links 24 to a similar lever 25, pivoted at 26 to the legs 10. The two levers 22 and 25 project toward each other and are connected by a block 27, which is provided with a pair of slots 28, adapted to receive pins 29, carried by the adjacent ends of the two levers 22 and 25. Pivoted to the block 27 on the axis at right angles to the axes of pins 28 and 29 is an eccentric-strap 30, carried by an eccentric 31, attached to the main drive-shaft 32. Shaft 32 carries a suitable clutch-pulley 33, which may be disconnected from and connected to the shaft 32 by a foot-lever 34.

The operation is as follows: Guide-blocks 13 are accurately positioned on the work-table so as to be in line with each other and accurately at right angles to the two shear-blades 14 14, and the two shear-blades 14 are brought into accurate parallelism by adjustment of the screws 11'. The sheet of material is then slipped beneath one of the shear-blades 15 and onto the work-table, with one edge of the sheet against the two blocks 13. Shaft 32 is then rotated, so as to depress the inner ends of the levers 22, thereby drawing the two shear-heads 16 downward simultaneously and simultaneously trimming the two opposite edges or ends of the sheet accurately.

I claim as my invention—

1. In a machine of the class described, the combination with a suitable supporting-frame, and work-table, of a pair of shear-blades carried by said table at opposite edges, means for adjusting the distance between said shear-blades, a pair of shear-blade heads reciprocally mounted on the main frame in position to cooperate with the first-mentioned shear-blades, and means for actuating said shear-blade heads.

2. In a machine of the class described, the combination with a suitable supporting-frame and work-table, of a pair of shear-blades carried by said table at opposite edges, means for adjusting the distance between said shear-blades, a pair of shear-blade heads reciprocally mounted on the main frame in position to cooperate with the first-mentioned shear-blades, and means for simultaneously actuating said shear-blade heads.

3. In a machine of the class described, the

combination of a suitable supporting-frame and two-part work-table, means for positioning material on said table, two shear-blades mounted at opposite sides of the work-table
5 one upon each of the two parts thereof, means for adjusting the two parts of the work-table toward and from each other to vary the distance between the shear-blades, two pairs of guide-brackets mounted on the main frame,
10 means for adjusting said guide-brackets along lines at an angle to the shear-blades, a shear-blade head reciprocally mounted in each pair of guide-brackets, and means for reciprocating said shear-blade heads.
15 4. In a machine of the class described, the combination of a suitable supporting-frame and work-table, means for positioning material on said table, two shear-blades mounted at opposite sides of the work-table, two

pairs of guide-brackets mounted on the main 20 frame, means for adjusting said guide-brackets along lines at an angle to the shear-blades, a shear-blade head reciprocally mounted in each pair of guide-brackets, a pair of levers projected toward each other and connected 25 at their adjacent ends, means for engaging said levers at their connected ends to reciprocate the same, and connections between each lever and a shear-blade head, substantially as and for the purpose set forth. 30

In witness whereof I have hereunto set my hand and seal, at Elwood, Indiana, this 29th day of December, A. D. 1905.

CHARLES W. BENNETT. [L. s.]

Witnesses:

J. H. FINE,
H. K. BAKER.