## C. C. BRUCKNER. ENGRAVING MACHINE TABLE.

No. 541,523.

Patented June 25, 1895.

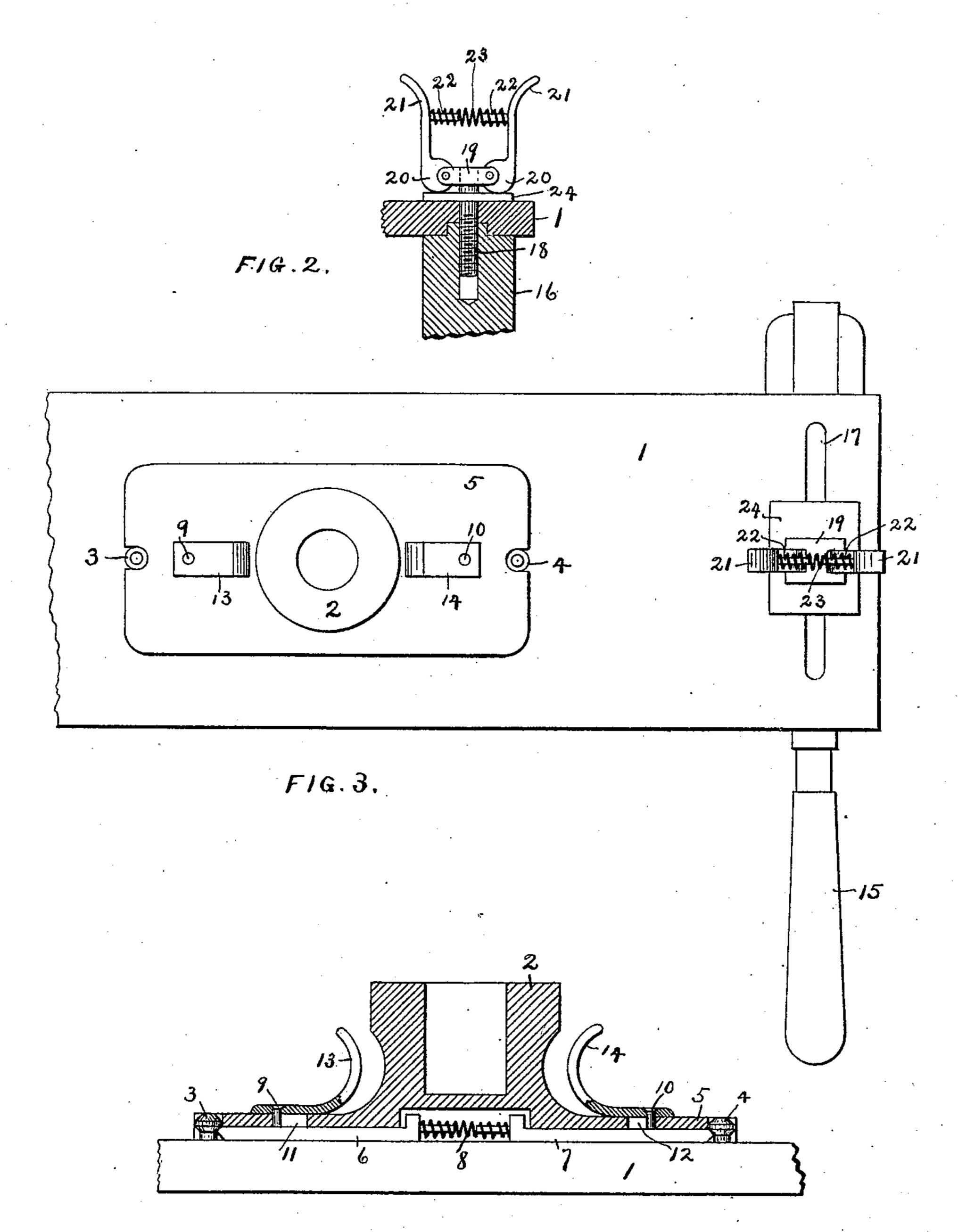


FIG. 1.

WITNESSES:

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CHARLES CLIFFORD BRUCKNER, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE NATIONAL ENGRAVING MACHINE COMPANY, OF SAME PLACE.

## ENGRAVING-MACHINE TABLE.

SPECIFICATION forming part of Letters Patent No. 541,523, dated June 25, 1895.

Application filed March 17, 1894. Serial No. 503,989. (No model.)

To all whom it may concern:

Be it known that I, CHARLES CLIFFORD BRUCKNER, a citizen of the United States, residing at Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Engraving-Machines, of which the following is a specification.

My invention relates to the class of engraving machines shown and described in my Patents No. 507,610, issued October 31, 1893, and No. 529,851, issued November 27, 1894, and has for its object improvement in certain details relating to the machine therein set forth.

In the accompanying drawings, Figure 1 is a section of the chuck-holder. Fig. 2 is a detail of the adjustable clamping device, and Fig. 3 is a plan of these parts located in their relative positions on the table of an engraving-machine.

20 1 is the work table of an engraving machine upon which is located a removable chuckholder 2, that is held in place by the studs 3 and 4. The lower part of the chuck-holder 2 extends out in the form of a flange 5 in the 25 bottom of which are located the slides 6 and 7 that engage the studs 3 and 4 to hold the chuck-holder in place. The slides 6 and 7 are pressed apart and into engagement with the stude 3 and 4 by means of the spring 8 lo-30 cated between them. On top of the flange 5, and connected to the slides 6 and 7 by the rivets 9 and 10 which pass through the slots 11 and 12, are two finger pieces 13 and 14. By taking hold of the finger pieces 13 and 14 35 and pressing them inward toward the body of the chuck-holder 2 the slides 6 and 7 are disengaged from the studs 3 and 4 and the chuck-holder may be removed. By the same means it may be replaced so that it will oc-40 cupy exactly the same position that it held before.

The engraving table 1 is reciprocated by means of a hand lever 15 upon which is mounted a pivoting block 16 that is adjustable along the slot 17 in the table 1 by means of a clamp on the upper face of the table. A stud 18 passes through the slot 17 and is screwed into the upper end of the block 16 which is in contact with the under face of the table 1. In the enlarged head 19 of the

stud 18 are pivoted the cams 20 that are provided with the arms 21 that have pins 22 on which is a spring 23 that acts to press the arms 21 apart. Between the cams 20 and the table 1 is a loose plate 24, and the shape of the cams 55 is such that the action of the spring 23 in pressing the arms 21 apart causes the cams to press down on this plate and to draw up the block 16 thereby clamping the table 1 between the plate 24 and the block 16. By 60 taking the arms 16 between the thumb and fingers and compressing the spring 23 the cams 20 will be released from pressure on the plate 24 and the clamp and block 16 may be slid anywhere along the slot 17.

It will be obvious that any wear or undue slackness in the clamp may be taken up by screwing the stud 18 farther down in the block 16.

Having thus fully described my invention, 70 what I claim as new, and desire to secure by Letters Patent, is—

1. In an engraving machine, a reciprocating work-table, pins or study thereon accurately locating a chuck-holder, a chuck-holder 75 provided with a socket for the reception of the chuck, and sliding spring-catches in said holder, whereby said holder is secured to or removed from the table, substantially as specified.

2. A chuck or work-holder, provided with a flanged base and with a socket for the reception of a chuck, recesses in said flange, adapted to engage and be centered by pins or studs, and spring-catches in the under face 85 of said flange, for the purpose of engaging said pins or studs to hold said holder rigidly upon the table, substantially as specified.

3. An adjustable clamp, consisting of a pin or stud with an enlarged head, slots cut in 90 said head for the reception of cam-arms, camarms pivoted within said slots and provided with pins, and a spring seated in said pins, whereby said cam-arms are held normally in clamping position, substantially as specified. 95

CHARLES CLIFFORD BRUCKNER.

Witnesses:

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