

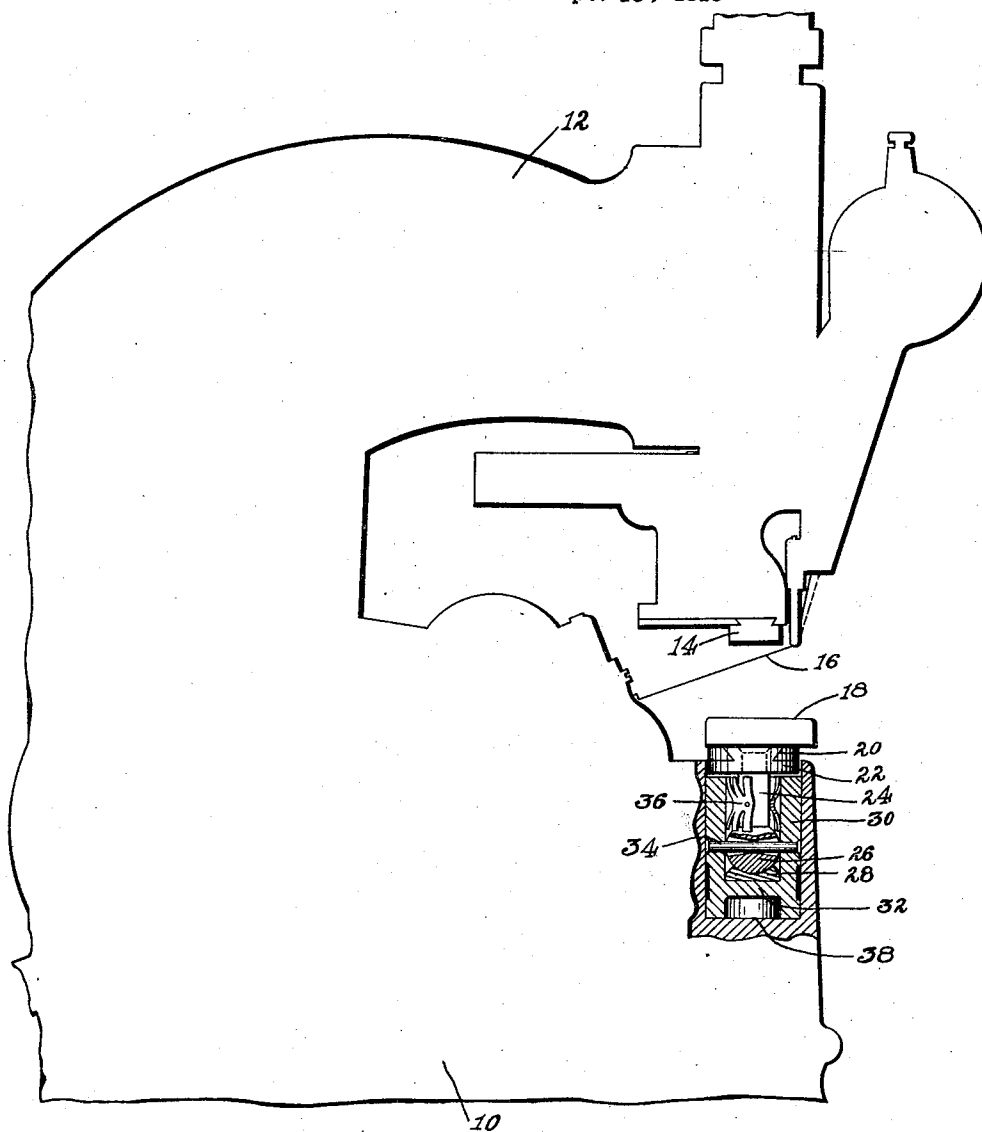
May 27, 1924.

E. W. SMITH ET AL

1,495,210

MARKING MACHINE

Original Filed Sept. 16, 1918



INVENTORS -

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1,495,210

UNITED STATES PATENT OFFICE.

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MARKING MACHINE.

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To all whom it may concern:

Be it known that we, EDWIN W. SMITH and DEANE A. CABOT, citizens of the United States, residing at Beverly, in the county of Essex and State of Massachusetts, and Boston, in the county of Suffolk and State of Massachusetts, respectively, have invented certain Improvements in Marking Machines, of which the following description, in connection with the accompanying drawings, is a specification, like reference characters on the drawings indicating like parts in the several figures.

This invention relates to marking machines, and is a division of the application for Patent No. 1,438,191, granted December 12, 1922.

In machines for marking, embossing and like operations, it is usual to provide a die and a co-operating impression member upon which the work is laid to receive an impression. The work which is presented to these machines is not of uniform thickness or area, and sometimes the face of the die does not lie parallel to its co-operating surface. Without some provision for compensating for these irregularities an impression is likely to be spoiled.

An object of this invention is to provide an improved apparatus by which an acceptable impression will always be obtained in spite of a lack of uniformity in the work or the die. In the illustrative apparatus, the impression member or work table that co-operates with the die is removably mounted on a spindle having a ball at the end resting on a hardened socket in a casing which is removably held in the frame, there being a pin-and-slot connection between the spindle and the casing to retain the parts together and allow swinging of the table laterally to equalize the pressure on the work.

Referring to the drawing, the figure is a side elevation of a marking machine with some parts in section.

The numeral 10 designates the frame which has an overhanging arm 12 at the front of which is mounted for vertical reciprocation, in any suitable manner, a die 14. If desired, a strip 16 of marking medium such as gold leaf may be fed beneath the die, but this is not essential. Carried upon the frame and aligned with the die is an im-

pression member furnished by a table 18. The table may be removably mounted as by dove-tailed ways 20 upon a head 22, so that supports of different forms and sizes may be supplied to the machine. From the under side of the head projects a slotted extension in the form of a spindle 24 having at its lower end a ball 26 seated in a hardened socket 28. The socket is mounted in a casing consisting of a cylindrical member 30 across which extends a supporting partition 32 for the socket. The table and its associated parts may be retained in place in the casing by a pin 34 passing laterally through the casing walls, and through a slot in the end of the extension. The slot flares outwardly from its center so that there is provision for swinging movement of the table laterally in any direction. About the spindle, contacting with it and the surrounding wall of the casing, is an annular spring 36 shown as formed of sheet metal with arms which at their centers are connected by a band pinned to the spindle, the outer ends of the arms resting against the casing. The spring normally maintains the spindle in a vertical position and the work supporting surface horizontal. The casing 30 is received by a cylindrical recess or bore 38 in the frame so that the work supporting structure is removable as a unit. The lateral yield of the table about the joint furnished by the ball 26, socket 28 and pin 34, permits the table automatically to adjust itself to the angle of the die surface and to irregularities in the work.

Having described our invention, what we claim as new and desire to secure by Letters Patent of the United States is:

1. In a machine of the class described, impression members having relative movement of approach, one of said impression members being provided with a spindle, a ball on the spindle, a member constructed and arranged to provide a universal support for the ball and associated parts, a casing surrounding the spindle, and means surrounding the spindle urging said impression member toward a central position in the casing.

2. In a machine of the class described, impression members having relative movement of approach, one of said members be-

ing provided with a spindle, a removable casing for the spindle, universal connections between the spindle and casing, and a spring arranged to hold the universally connected member in normal alinement with its associated impression member.

3. In a machine of the class described, a frame provided with a recess, a casing mounted in the recess and having a socket, a table provided with a spindle entering the casing, and a ball on the spindle engaging the socket in the casing.

4. In a machine of the class described, a frame provided with a recess, a casing mounted in the recess and having a socket, a table provided with a spindle entering the casing, a ball on the spindle engaging the socket in the casing, and a spring surrounding the spindle and engaging the interior of the casing.

5. In a machine of the class described, impression members having relative movement of approach, one of said members being provided with a slotted extension, a casing to receive the extension, and a pin traversing the slot in the extension and connected to the casing.

6. In a machine of the class described, a frame provided with a recess, a casing

mounted in the recess, a table having an extension entering said casing, and a pin and slot connection between the extension and the casing to allow the table to swing laterally.

7. In a machine of the class described, a frame provided with a recess, a casing mounted in the recess, a table, a spindle projecting from the table, said spindle entering the casing and being spaced from the walls thereof to have provision for lateral movement, and a spring interposed between the spindle and casing and secured to one of said members to maintain the table normally in a central position.

8. In a machine of the class described, a frame, a casing mounted in the frame, a spindle entering the casing, and a table having dovetailed connection with said spindle to allow removal.

In testimony whereof I, the said EDWIN W. SMITH, have signed my name to this specification.

EDWIN W. SMITH.

In testimony whereof I, the said DEANE A. CABOT, have signed my name to this specification.

DEANE A. CABOT.