

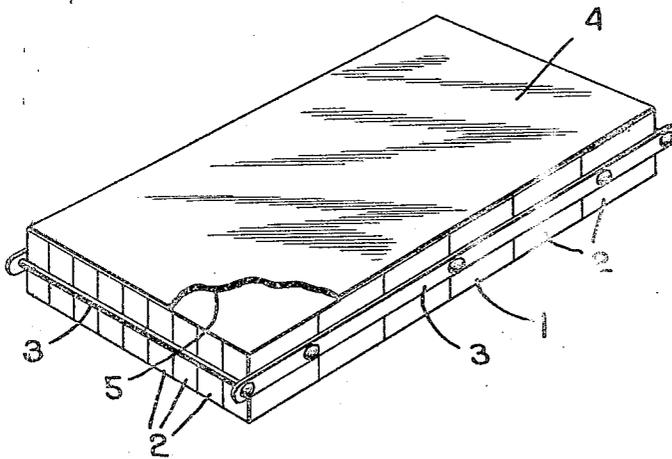
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F. A. SHEA

CUTTING BLOCK FOR CLICKING MACHINES AND THE LIKE

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# UNITED STATES PATENT OFFICE.

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## CUTTING BLOCK FOR CLICKING MACHINES AND THE LIKE.

Application filed September 7, 1922. Serial No. 536,781.

*To all whom it may concern:*

Be it known that I, FRANCIS A. SHEA, a citizen of the United States, and resident of Boston, county of Suffolk, State of Massachusetts, have invented an Improvement in Cutting Blocks for Clicking Machines and the like, of which the following description, in connection with the accompanying drawing, is a specification, like characters on the drawing representing like parts.

This invention relates to a cutting block adapted for use in those machines which are designed to cut or die out blanks from sheet material by means of cutting dies. These machines are commonly provided with a cutting bed on which the material is supported and a vertically-moving head adapted to act on the cutting die and force the latter downwardly through the material thus cutting out the blank of the desired shape.

In order that the machine may operate correctly it is highly important that the work supporting surface of the cutting bed should be always perfectly flat and smooth because if the surface is uneven the cutting edge of the cutting die will strike the high spots and will not cut clear through the material on the low spots.

It has heretofore been the practice to make these cutting blocks of wood but experience has shown that after a wooden cutting block has been used for sometime the continued action of the cutting edge of the die against the wooden surface chips the latter sufficiently so that it becomes uneven and when this condition arises it becomes necessary to refinish said surface in order to make it perfectly plain and flat again.

One of the objects of my invention is to provide a novel cutting block which has a work-supporting surface of such a nature that it will not chip or wear unevenly even after long continued use, whereby the block always presents a flat level surface and does not need to be refinished.

I accomplish this end by making the surface of the block of some material which is slightly elastic and is tough so that when the knife edge strikes it it will give sufficiently so that the knife does not mar it, the resiliency of said surface causing it to return to its normal flat condition when the pressure on the knife is removed.

While various kinds of material may be

used which have the above characteristics I find that celluloid answers all the purposes and that an eminently satisfactory cutting block can be made by facing the wooden block with a sheet of celluloid.

In order to give a better understanding of the invention I have illustrated in the drawings a selected embodiment thereof which will now be described after which the novel features will be pointed out in the appended claims.

The drawings show in perspective a cutting block embodying my invention.

This cutting block has the body portion which is made of wood, and can conveniently be formed by a plurality of wooden blocks 2 which are assembled to make a bed of the desired size, said blocks being arranged with the grain extending vertically. These blocks are shown as bound together by a binding member 3 all as usual in cutting beds of this type.

The work-supporting surface 4 of the cutting bed is made of a material which is tough but which will yield slightly when engaged by the cutting edge of the die so that the die will not chip or cut it.

In the present embodiment of the invention this surface is provided by securing a sheet 5 of celluloid to the top of the body 1 of the block. Said sheet may be placed loosely on the block or may be adhesively united thereto or secured thereto in any suitable way. The sheet will be of uniform thickness and presents a perfectly flat cutting surface 4.

In order that the cutting die may function properly it is, of course, necessary that it should be forced clear through the material on the surface 4 so as to make a clean cut, and this brings the cutting edge firmly against the face of the block. Where the block is provided with a face of the above described character the engagement of the cutting edge of the die thereagainst does not chip the face because of the tough elastic quality of said face and, therefore, the machine may be continuously used without the cutting face 4 showing any mars or cuts, such as result where the face of the cutting block is of wood.

With this invention, therefore, the life of the cutting die is greatly lengthened and even after a long continued use it presents a smooth even cutting surface.

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While I have referred to celluloid as making a suitable face for the cutting block, yet I do not wish to be limited to the use of celluloid as my invention contemplates the use of any material which has the above described desirable characteristics.

I claim.

1. A cutting bed for clicking machines and the like comprising a body formed of wooden blocks arranged with a grain extending perpendicular to the cutting surface, and a sheet of celluloid overlying the grain end of the block and forming the cutting surface of the cutting bed.

2. A cutting bed for clicking machines and the like comprising a body having a celluloid work-receiving face.

3. A cutting block for clicking machines and the like comprising a body made of wooden blocks arranged with their grain extending perpendicular to the cutting face, and a relatively thin sheet of tough but slightly resilient material covering the grain ends of the block and forming the cutting face.

In testimony whereof, I have signed my name to this specification.

FRANCIS A. SHEA.