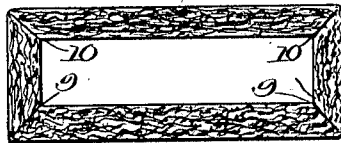
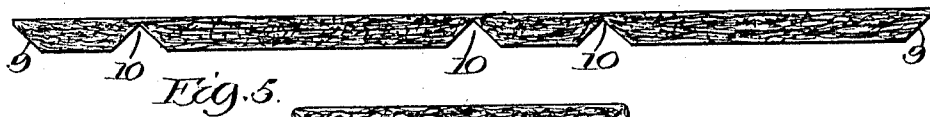
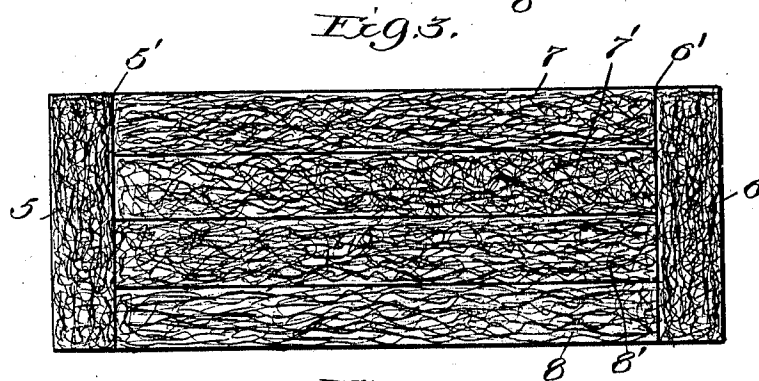
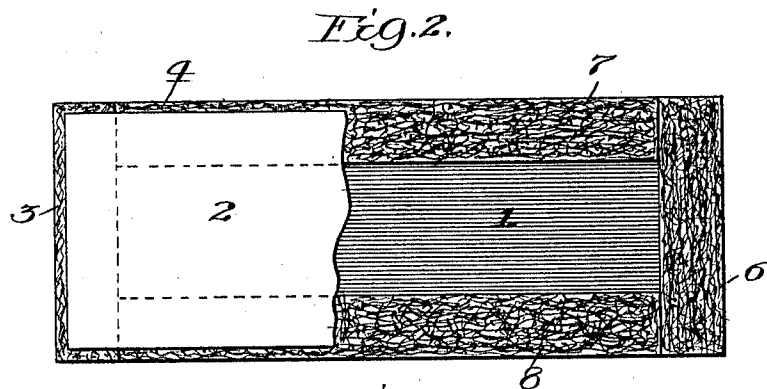
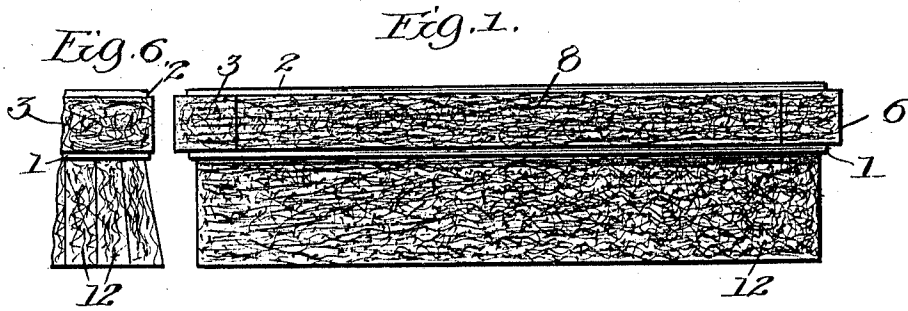


ERASER.

945,377.

Patented Jan. 4, 1910.



Witnesses
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UNITED STATES PATENT OFFICE.

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ERASER.

945,377.

Specification of Letters Patent.

Patented Jan. 4, 1910.

Application filed July 25, 1907. Serial No. 385,458.

To all whom it may concern:

Be it known that I, THOMAS H. COSTELLO, a citizen of the United States, residing at the city of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Erasers, of which the following is a specification.

My invention relates to devices for removing chalk and similar marks from blackboards and the like, and the object thereof is to provide an eraser which is simple in construction and cheap to manufacture, and which will be noiseless and durable in use.

The several parts are selected, arranged and disposed so that I obtain great economy of manufacture, while all rigid parts may be padded or protected so that they will not produce noise when striking against external objects.

The principles of my invention are illustrated in the drawings, in which—

Figure 1 shows a side view of my device; Fig. 2 shows a top view thereof, a portion of the external stiffening slip or layer being removed; Fig. 3 is illustrative of means by which material may be cut and arranged to utilize the advantages of my invention. Figs. 4 and 5 being comparative reduced in size represent an alternative means of construction. Fig. 6 is a fractional end view of the eraser shown in Fig. 1.

Further describing my invention with reference to the drawings, in which like characters of reference denote like parts throughout: 1 is a stiffening member which may consist of a thin piece or slip of any suitable material such as veneer of single or greater ply or of card- or press-board. 2 is a similar strengthening slip between which and 1 are placed spacing strips. I prefer to make them of felt or other elastic material, and in order to economize the quantity thereof placed in the eraser and also to lighten it, the space between the members 1 and 2 may be made hollow. The felt packing or spacing material being placed adjacent to the outer edges of the eraser, and the edges of such material 3, 4 projecting beyond the stiffening slips, forms a fender to prevent said slips from striking

or being struck against any solid material. The structure thus described and which is shown in detail in Fig. 2 provides means by which large quantities of felt which otherwise would be practically waste in the process of manufacture may be utilized to advantage. Further economy in the use of material is shown in Fig. 3 in which the end pieces 5 and 6 are removed by transverse cuts 5' and 6', and then, by longitudinal cuts, the portions 7, 8 are made available for constructing the device as shown in Fig. 2, while the strips 7' and 8' are left over to form the corresponding strips of another completed device.

The principles of my invention are further illustrated in Figs. 4 and 5 in which a narrow strip of felt is shown, on one side of which are made the cuts 9 and 10. By bending said strip at the notches 10 a packing or spacing strip, which may be placed between the members 1 and 2 is thus formed which is continuous except at one corner as shown in Fig. 5. The elements thus described in their relation to each other should be securely glued or cemented together and thus form a light but rigid back, to the underside of which, viz., the member 1, are glued or cemented the erasing strips 12.

I claim:

1. In an eraser; the combination with the frictional face thereof, of a hollow back comprising stiffening strips, and a spacing strip of elastic material notched at the inside edges at points corresponding to the corners of the eraser secured between the edges of said strips.

2. In an eraser; the combination with the frictional face thereof, of a hollow back comprising stiffening strips, and a spacing strip of elastic material notched at the inside edges at points corresponding to the corners of the eraser secured between the edges of said strips and extending therebeyond.

3. In an eraser; upper and lower stiffening strips constituting back members, elastic packing material cemented to the inner faces of said members whereby the same are held in relation to each other, said packing material having free edges projecting beyond the edges of the back members, and fric-

tional material secured to the outer face of the lower back member.

4. An eraser, comprising spaced stiffening strips, elastic strips of spacing material between said stiffening strips and secured thereto, and separate elastic strips of rubbing material secured to the under face of the lowermost stiffening strip.

In witness whereof, I have hereunto set my hand, this 6th day of July A. D. 1907, 10 in the presence of two subscribing witnesses.

T. H. COSTELLO.

Witnesses:

C. K. CHAMBERLAIN,
A. S. PHILLIPS.