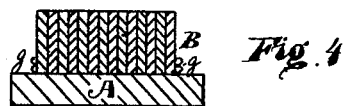
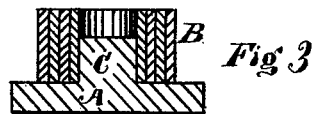
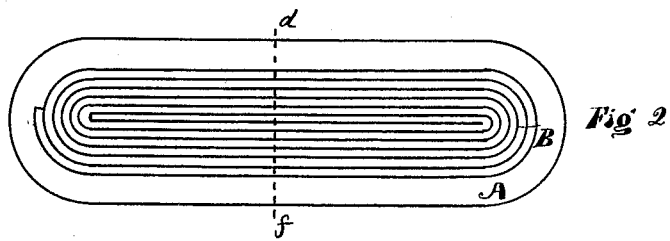
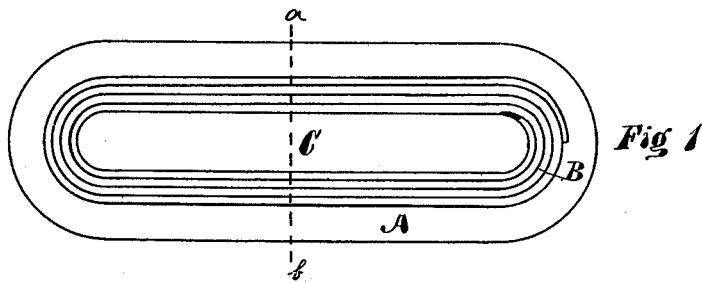


C. J. HIGGINS.
BLACK-BOARD ERASERS.

No. 185,677.

Patented Dec. 26, 1876.



Witnesses:
E. C. Whitney
J. S. Schoonover

Inventor:
Charles J. Higgins
Per E. C. Whitney his atty.

UNITED STATES PATENT OFFICE.

CHARLES J. HIGGINS, OF INDIANAPOLIS, INDIANA.

IMPROVEMENT IN BLACKBOARD-ERASERS.

Specification forming part of Letters Patent No. **185,677**, dated December 26, 1876; application filed December 1, 1876.

To all whom it may concern:

Be it known that I, CHARLES J. HIGGINS, of Indianapolis, county of Marion, State of Indiana, have invented a new and useful Improvement in Blackboard or other Rubbers of which the following is an exact description, reference being had to the accompanying drawings.

The object of my invention is to produce a rubber or eraser that is cheap and durable, and especially adapted to remove marks from a blackboard. It may also be advantageously used for rubbing or polishing furniture or other surfaces; and my invention consists in applying list or other selvage to a back of suitable material, in such a manner as to allow the selvage-edges, when applied to the surface of blackboards, to perfectly erase chalk or similar marks therefrom.

In the drawings, Figure 1 represents a plan view of one form, in which the list or selvage is coiled around a central projecting piece of wood or other material that is formed on or attached to the back. Fig. 2 is a plan view of another form, in which there is no projecting or central piece of wood or other material, and the selvage is coiled or laid in layers side by side, and secured to the back. Fig. 3 is a section of Fig. 1, taken through line *a b*. Fig. 4 is a section of Fig. 2, taken through line *d f*.

A represents the back of the eraser or rubber, which may be made of any suitable material, and may be made perfectly flat, as shown in Fig. 4, or with a central rib, as in Fig. 3, or in any other suitable manner. The list or selvage B is coiled around the central rib C, as shown in Figs. 1 and 3, and attached to the said rib C by glue, tacks, screws, or other suitable means, so as to hold the strip or strips secure; or the strip or strips may be coiled, as shown in Figs. 2 and 4, (without a central rib,) and secured to the back A by glue or other suitable means of fastening, and the coil may be held together by being bound with wire, as shown at *g g* in Fig. 1; or a band of sheet tin or other material may

be used. The layers of list or selvage may be separated by strips of pasteboard or other thin material, so as to take less material to form the eraser.

By this construction of parts I am enabled to use a comparatively waste material, which is very much cheaper than the materials heretofore employed to form the brush or rubbing parts of erasers. The advantage of arranging the selvage material in a coil, especially in the elongated form shown, is twofold: The material is quickly put in shape; the layers at the ends of the coil are stiffer than elsewhere, and serve to support the body of list or selvage, and prevent its turning over or breaking down; and, secondly, leaving interstices between the loosely-coiled layers for freely receiving and holding the crayon or chalk particles or dust away from the rubbing-surface. It also leaves the said dust in condition to be easily dislodged at will.

I am aware that brushes have heretofore been formed of strips of india-rubber and material other than list or selvage in a coil, either as a wad, simply, or having their combined edges attached to a suitable backing; and such I do not claim broadly; but

What I claim as new, and wish to secure by Letters Patent, is—

1. A blackboard-eraser, brush, or other rubber, consisting of the back A, and coiled strip B, of list or other selvage, constructed and arranged substantially as and for the purpose described.

2. As a new article of manufacture, a blackboard-eraser, brush, or other rubber, provided with a rubbing-surface, composed of a strip or strips of list or other selvage material, applied edgewise to any suitable backing, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES J. HIGGINS.

Witnesses:

E. O. FRINK,
E. C. WHITNEY.