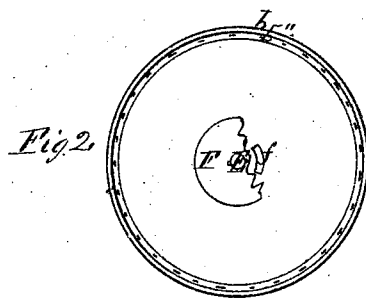
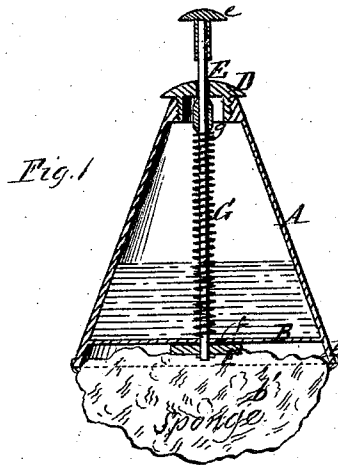


F. W. PORTER.

Slate and Blackboard Cleaner.

No. 118,150.

Patented August 15, 1871.



Witnesses

F. B. Curtis
J. M. Hyne

Inventor

F. W. Porter,
Chipman & Co.,
attys.

UNITED STATES PATENT OFFICE.

FREDERICK W. PORTER, OF WINONA, MINNESOTA.

IMPROVEMENT IN SLATE-WASHERS.

Specification forming part of Letters Patent No. 118,150, dated August 15, 1871.

To all whom it may concern:

Beit known that I, FREDERICK W. PORTER, of Winona, in the county of Winona and State of Minnesota, have invented a new and valuable Improvement in Slate and Blackboard-Cleaners; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a vertical section of my invention. Fig. 2 is an under-side view of the same with sponge removed.

This invention has relation to an improved slate and blackboard-cleaner, which consists of a water-cup holding a sponge, and provided with a spring-valve arranged and operating in such a manner that the same sponge may be used as a washer or as a drier, as may be desired.

In the accompanying drawing, A represents a conical-shaped cup designed to hold water. B represents the bottom part, surrounded by a rim or flange, *b*, for the purpose of holding the sponge or cleaner *b'*, which is secured in place by means of a thread or cord inserted through the holes *b''* or by other suitable means. D designates a cap with a projecting edge screwed into the top opening of the cup. A central opening is made through this cap to receive the valve-rod, marked E, which passes through the center of the cup and projects through an aperture in

the bottom. F denotes a disk or washer fixed on the lower end of this valve-rod, and arranged to cover a small escape-opening, *f*, cut in said bottom. The rod E is movable and provided with a thumb-piece, *e*, by means of which it may be pressed down to let the water escape through the opening *f* into the sponge. G indicates a spring coiled around the valve-rod, between the bottom part and a stop, *g*. It is designed to press the rod in a contrary direction to close the valve-disk F. The disk, when pressed down, admits the water to the sponge from the conical reservoir. The conical form of the cup renders it more convenient in handling, and the projecting edge of the cap serves as a means of holding the instrument in a proper position. Water is put into the cup through the top opening when the cap is removed. The thumb-piece *e* is arranged so that it may be readily taken off, when required, so as to remove the cap.

I claim as my invention—

The blackboard-cleaner, having the conical cup A with projecting flange *b* and perforated bottom B, sponge *b'*, cap D, rod E, and valve F, arranged substantially as and for the purpose specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

FREDERICK W. PORTER.

Witnesses:

S. W. RITCHIE,
JACOB STORY.