Anton Streit & Henry Streit's
improved antifriction bed plate for
wood planing machines

PATENTED
DEC 3 1867

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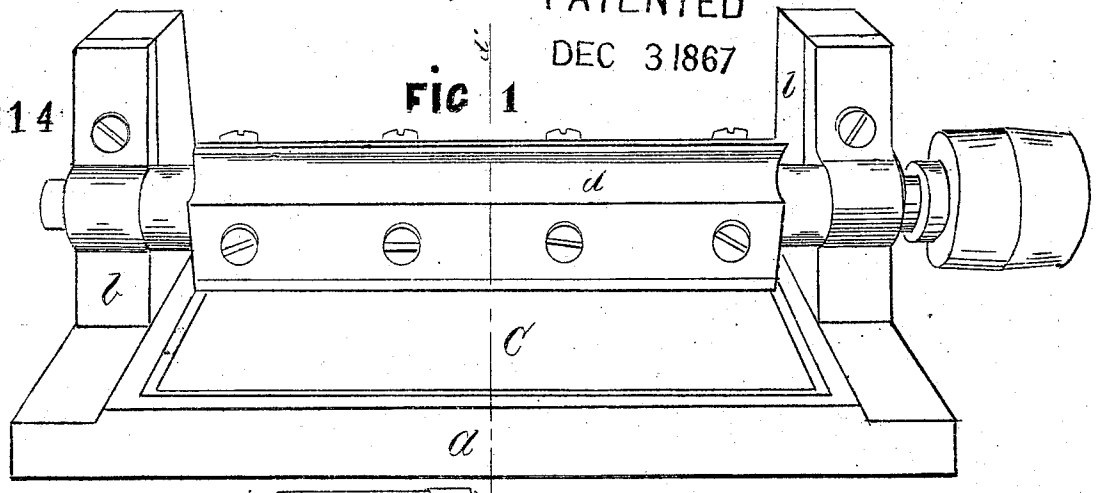
FIG 1



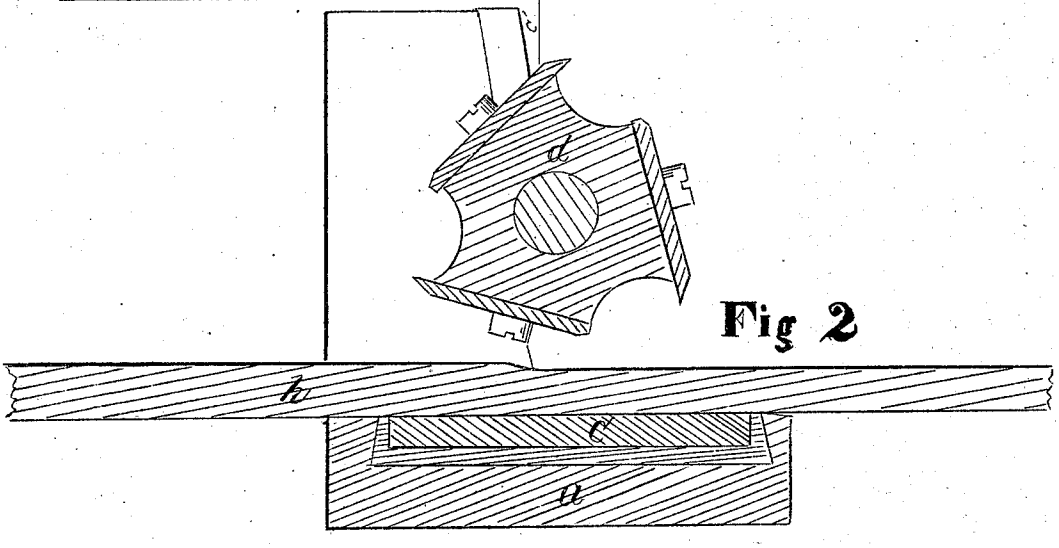


Fig 2

Witnesss
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W. S. Kelley

inventors
Anton Streit
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United States Patent Office.

ANTON STREIT AND HENRY STREIT, OF CINCINNATI, OHIO, ASSIGNORS TO I. A. FAY AND COMPANY, OF SAME PLACE.

Letters Patent No. 71,814, *dated December* 3, 1867.

IMPROVEMENT IN WOOD-PLANING MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that we, ANTON STREIT and HENRY STREIT, of Cincinnati, in the county of Hamilton, and State of Ohio, have invented a new and useful Improvement in the Beds of Wood-Planing Machines; and we do hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a perspective elevation of the bed and cylinder-frame of a common planing-machine with our improvement, and

Figure 2 is a cross-section through fig. 1 on line C′ *d*′.

The nature of our invention consists in constructing the bed-piece of a rotary planing-machine with a false or detachable face of glass or other similar material embedded in a suitable cavity formed in the bed, for the purpose as herein described.

In planing wood with revolving cutters, it is found necessary to provide a solid bed opposite or beneath the cutters, to resist the shock and jar from the cut, and as no clamping-device can be applied to the board or piece near to the point being acted upon by the cutters, it is also found necessary to arrange the feed-rolls and guides so that the board or piece may bear firmly upon the bed beneath or opposite the cutters, causing friction and a rapid wear of the bed from the rough or undressed side of the lumber passing over it. This rapid wear becomes a source of great difficulty when the lumber dressed has been rafted in muddy water, for transportation, or exposed to road-dust in seasoning. Another trouble from this wear is experienced in planing and matching-machines, when flooring-boards of narrow width are passed continually over a particular portion of the bed, wearing it away at one point and unfitting the machine for dressing wide boards. Attempts to use rolls as a substitute for plane surfaces have thus far been unsuccessful, from their presenting but a line of contact, and not forming a firm bed as a support.

The invention here illustrated overcomes in a great measure the difficulties of wear and friction, by inserting beneath or opposite the cylinder a plate of glass, porcelain, or other similar hard material, in such manner that it can be repaired or replaced with ordinary skill, without replaning or refacing the metal portion of the bed; the harder nature of the material giving greater durability, and from its anti-friction qualities causing the lumber to feed with less power and pressure upon the feed-rolls.

To enable others skilled in the art to make and use our invention, we will proceed to describe the manner of constructing the same, with the aid of the drawings.

a is a bed-piece of a common wood-planing machine, with the cylinder-supports *b b* cast upon it. C is a plate of glass or similar hard material inserted in the main casting, by means of a suitable cavity cored out to receive it, and held firmly in its place by a filling, *f*, of brimstone or other plastic material, that can be melted and poured around and under the plate C. *d* is the cutting-cylinder, and *h* represents a board being passed over the bed C. The hard bed-piece C is set in the same manner in moulding, sticking, and other wood-planing machines, when the conditions of their operation require its use.

We are aware that glass has been used as a facing upon carpenters' planes; such use of glass we do not claim, but

What we do claim as our invention, is—

The removable glass-facing C of the bed of a wood-planing machine, when constructed and applied substantially as and for the purposes described.

ANTON STREIT,
HENRY STREIT.

Witnesses:
W. C. HARD,
W. S. KELLEY.