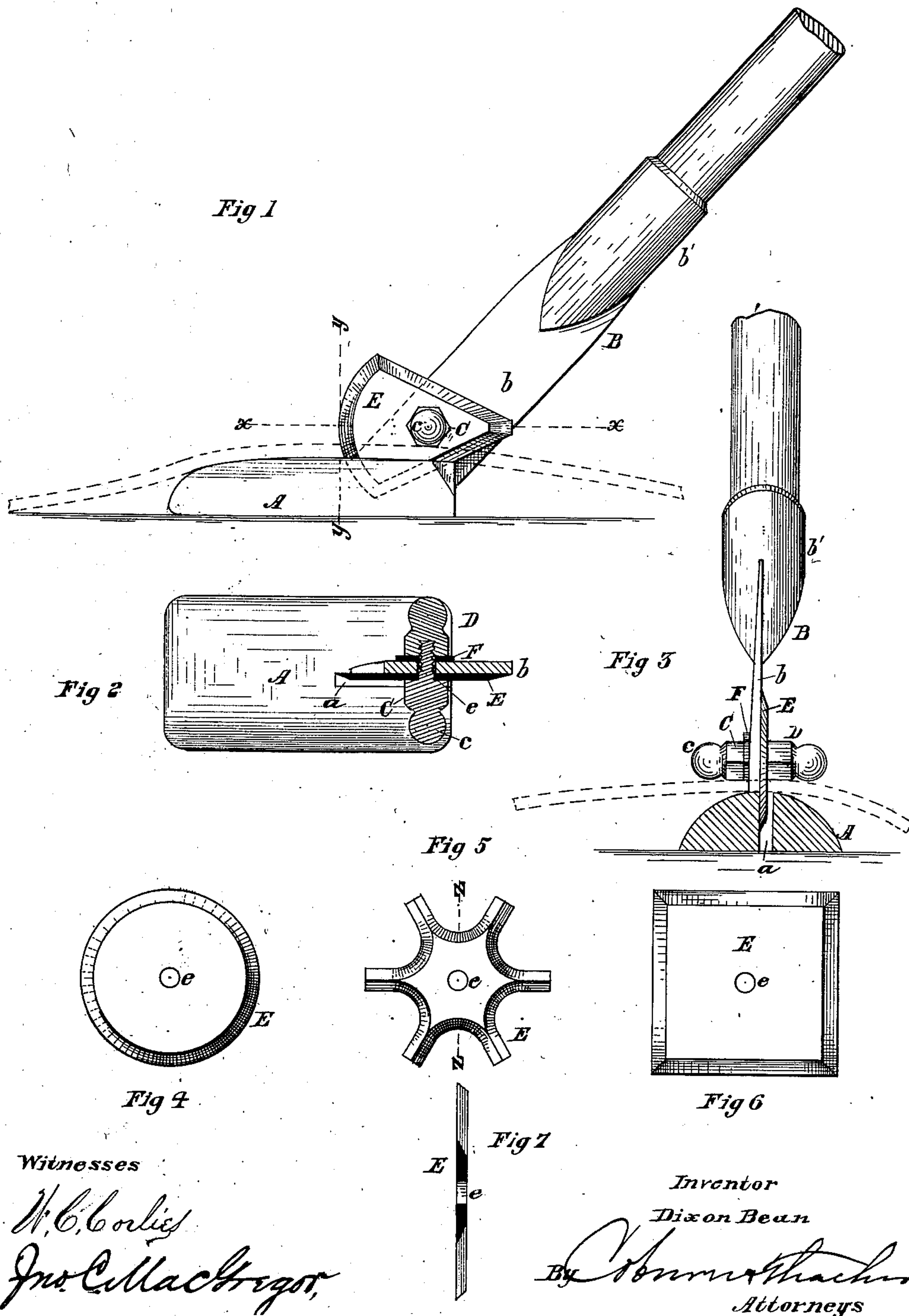


(No Model.)

D. BEAN.
CARPET CUTTER.

No. 245,049.

Patented Aug. 2, 1881.



UNITED STATES PATENT OFFICE.

DIXON BEAN, OF CHICAGO, ILLINOIS.

CARPET-CUTTER.

SPECIFICATION forming part of Letters Patent No. 245,049, dated August 2, 1881.

Application filed April 25, 1881. (No model.)

To all whom it may concern:

Be it known that I, DIXON BEAN, a citizen of the United States, residing in the city of Chicago, in the county of Cook, in the State of Illinois, have invented certain new and useful Improvements in Carpet-Cutters, which are fully set forth in the following specification, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation of my improved carpet-cutter. Fig. 2 is a section on the line *xx* in Fig. 1. Fig. 3 is a section on the line *yy* in Fig. 1. Figs. 4, 5, and 6 are side elevations of modified forms of the blade. Fig. 7 is a section on the line *zz* in Fig. 5.

The same letters denote the same parts in all the figures.

My invention relates to implements for cutting carpets or oil-cloths. These are frequently made in double breadths, and oil-cloth, even when not made double, has often a considerable surplus of breadth which it is worth while to save. The separation of the breadths and removal of the marginal surplus in these cases is now made by the use of shears or a knife—a process both slow and inconvenient.

The object of my invention is to make the process convenient and rapid; and it consists in a cutter arranged to be propelled smoothly through the carpet by means of a long handle attached to it at a convenient angle.

It consists, further, in a pivotally-adjustable blade having a continuous edge, so that when one part of the edge becomes dull another part may be brought into use by giving the blade a slight rotary motion.

It consists, also, in the particular devices and combinations of devices which will be fully described hereinafter, and definitely pointed out in the claims.

In the drawings, A denotes a horizontal plate of metal or other suitable material, flat on its under side, and with an upper surface sloping to a thin edge all around, so that the plate may slip readily under a carpet or oil-cloth. From the rear end of this plate a shank, B, extends upward and backward at a convenient angle for pushing the plate horizontally forward by means of a long handle set in the upper end of the shank, an angle of about forty-

five degrees being preferable. The lower part, *b*, of this shank is thin, especially on the front edge, so as to pass readily between the severed breadths of carpet. The upper part, *b'*, expands into a hollow cylinder, so as to be a socket for the handle.

A little above the plate A the part *b* of the shank is perforated, so as to allow a bolt, C, to pass through it. This bolt is threaded at one end, and is enlarged at the other, so as to form a convenient handle, *c*, by which it may be screwed or unscrewed. A nut, D, shaped outwardly like the enlarged part of the bolt, fits on the threaded end of the bolt, so as to rest squarely against the side of the shank.

The blade E is perforated in its center, *e*, so as to allow the bolt to pass through it, the unthreaded part of the bolt being long enough to pass through the shank and afford a bearing outside of it for the blade. The perforation in the blade is large enough to allow it to turn freely on the bolt, so that it may be adjusted in any desired position in the same vertical plane. A slot, *a*, in the horizontal plate allows the blade to pass through the plate. When the blade is set in the position desired the nut D is tightened, and it is held firmly between the enlarged part *c* of the bolt and the side of the shank. This clasp of the blade against the shank may be aided by the interposition of a washer, F.

The blade is edged on its entire periphery, so that when that part of the edge which is used in cutting becomes dull the nut D can be loosened and another part of the edge brought into service by a very slight turning of the blade, only a very small part of the edge being actually in contact with the carpet or oil-cloth in any one position of the blade. By this expedient it will be only at long intervals that the blade will have to be taken off for sharpening.

The particular form of blade shown in Fig. 1 of the drawings is the one which I find preferable. It is triangular in general form, the base being developed into a circular arc. A circular, stellar, or square form, like those shown in Figs. 4, 5, and 6, may, however, be used with good effect.

A longitudinal slot, *a*, in the plate A on the

same side of the shank on which the blade is set permits the blade to turn through a complete circle, the thickness of the plate in that part being sufficient to allow the blade to be
5 pivoted low enough to give a horizontal cut in every position, while not allowing its lowest part to touch the floor.

By placing the bolt-hole higher on the shank the slot might be dispensed with; but the
10 contact of the edge with the carpet would, in some positions of the blade and in every position of the circular blade, shown in Fig. 4, be unfavorable to an even and easy cut.

In operation the forward end of the plate A
15 is slipped under the carpet to be cut, and the cutter is then pushed along by the handle set in the upper part, *b'*, of the shank. The nut D and the enlarged part *c* of the bolt serve as
20 guides to keep down that part of the carpet which is being cut.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a carpet-cutter, the slotted horizontal plate A, in combination with a shank extending therefrom upward and backward, a cutting-blade edged on its entire periphery and pivoted on the shank, and means for securing the blade in any desired adjustment, substantially as and for the purpose described.

2. The slotted horizontal plate A, inclined shank B, pivoted triangular blade E, bolt C, and nut D, all constructed, arranged, and operating in combination, substantially as and for the purpose described.

DIXON BEAN.

Witnesses:

GEORGE R. CUTLER,
THOMAS H. PEASE.