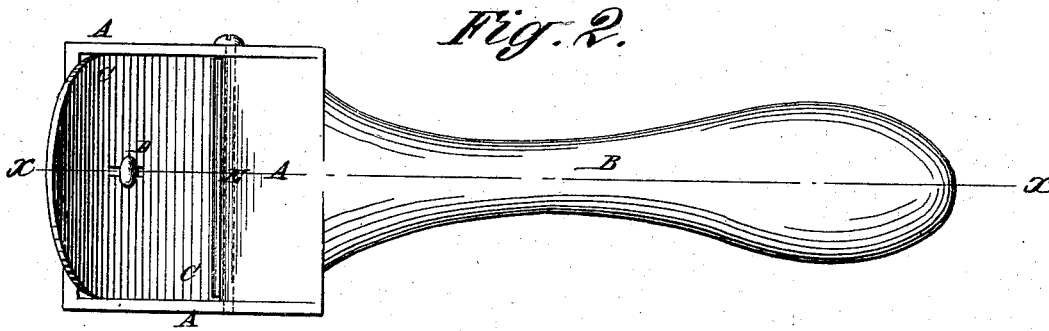
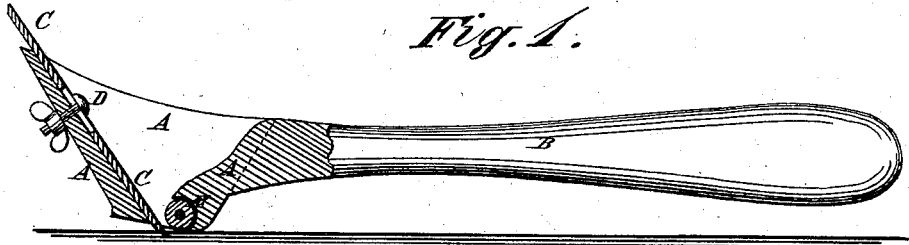


J. P. TIERNEY.

BOX-SCRAPER.

No. 189,967.

Patented April 24, 1877.



WITNESSES:

*H. Rydquist*  
*H. Scarborough*

INVENTOR:

*J. P. Tierney*  
BY *Munn & Co.*  
ATTORNEYS.

# UNITED STATES PATENT OFFICE.

JOHN P. TIERNEY, OF SACRAMENTO, CALIFORNIA.

## IMPROVEMENT IN BOX-SCRAPERS.

Specification forming part of Letters Patent No. **189,967**, dated April 24, 1877; application filed January 29, 1877.

*To all whom it may concern :*

Be it known that I, JOHN P. TIERNEY, of Sacramento, in the county of Sacramento and State of California, have invented a new and useful Improvement in Box-Scrapers, of which the following is a specification :

Figure 1 is a longitudinal section of my improved box-scrapers, taken through the line *x x*, Fig. 2. Fig. 2 is a top view of the same.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved tool for scraping boxes, which shall be simple in construction and convenient in use, and which shall be so constructed that the cutter may be readily detached to be sharpened, and may be set forward to take up the wear.

The invention will first be described in connection with the drawing, and then pointed out in the claim.

A is the knife-box, which is made hopper-shaped, and to the forward side of which is attached a handle, B. C is the knife or cutter, which fits against the inner surface of the rear side of the box A, so that its edge may project through the slot in the bottom of the

said box A. The knife C is slotted longitudinally to receive the bolt D, which also passes through a hole in the back of the box A, and has a hand-nut screwed upon its end, so that the knife C can be adjusted by loosening the said bolt D, and can be removed to be sharpened by taking out the said bolt. The lower edge of the box A is concaved longitudinally, and in the cavity thus formed is placed a roller, E, which revolves upon a long screw, which passes longitudinally through the roller E, through a hole in one side of the box A, and screws into a screw-hole in the other side of said box. The roller E prevents the instrument from becoming clogged with shavings. The roller E may be united, if desired.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

An improved box-scrapers, formed of the hopper-shaped knife-box A, the handle B, the knife C, the bolt D, and the roller E, substantially as herein shown and described.

JOHN P. TIERNEY.

Witnesses :

JOHN HAWLY,  
JAMES GLENN.