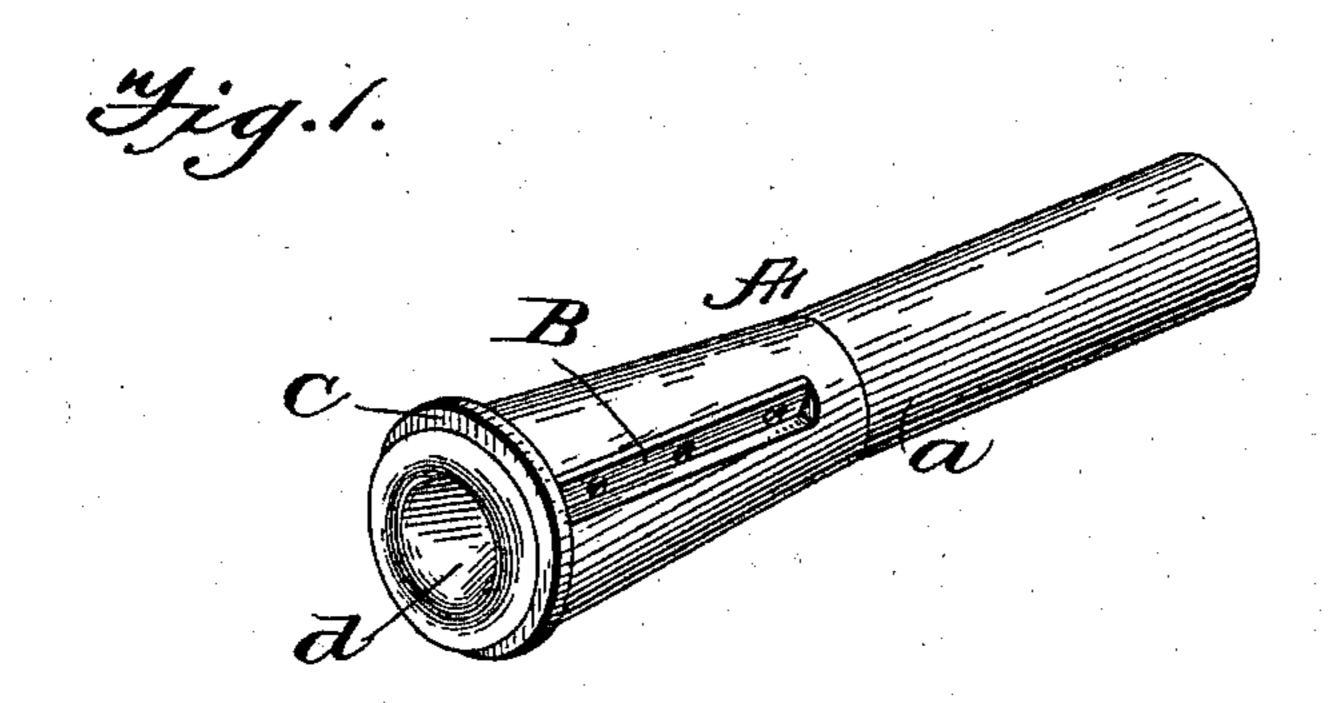
(No Model.)

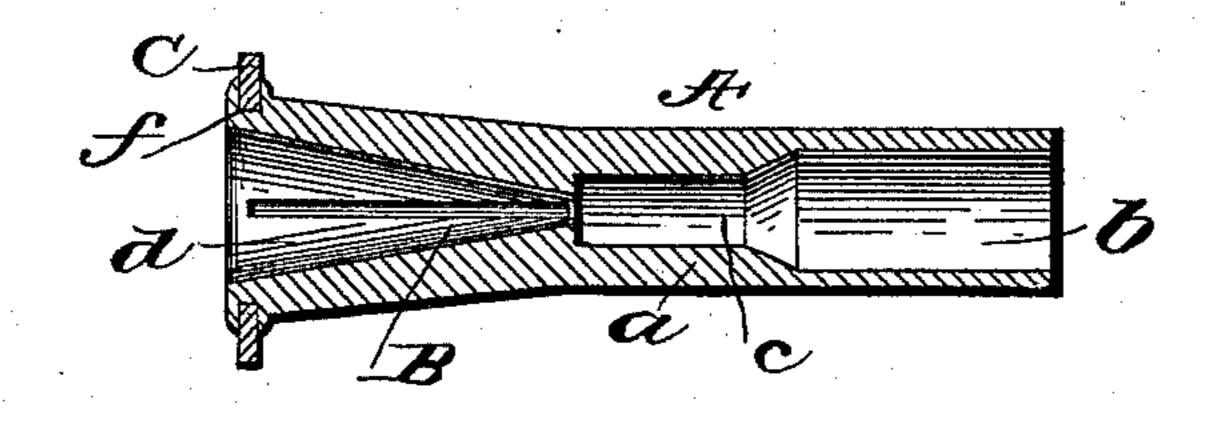
J. O. GRAVES.
PENCIL SHARPENER.

No. 585,670.

Patented July 6, 1897.



yig. 2.



Tig. 3.

WITNESSES Collins. INVENTOR, James O. Graves, ly John Wedderburn Attorney

United States Patent Office.

JAMES O. GRAVES, OF PRIDE'S CROSSING, MASSACHUSETTS.

PENCIL-SHARPENER.

SPECIFICATION forming part of Letters Patent No. 585,670, dated July 6, 1897.

Application filed September 25, 1896. Serial No. 606,984. (No model.)

To all whom it may concern:

Be it known that I, JAMES O. GRAVES, of Pride's Crossing, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Pencil-Sharpeners; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains 10 to make and use the same.

This invention relates to certain new and useful improvements in pencil-sharpeners; and it has for its objects, among others, to provide a simple and cheap device that can be 15 readily carried in the pocket or hung upon the pencil-point and which shall combine in the one article a pencil-sharpener, a point-guard, and an eraser. It may be made of metal or hard rubber or a combination of both of these 20 materials and in practice will be found most efficient for the purposes for which it is intended.

Other objects and advantages of the invention will hereinafter appear and the novel 25 features thereof will be specifically defined by the appended claim.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part 30 of this specification, and in which—

Figure 1 is a perspective view of my improvement. Fig. 2 is a longitudinal section through the same. Fig. 3 is a cross-section.

Like letters of reference indicate like parts

35 throughout the several views.

Referring now to the details of the drawings by letter, A designates the device, which comprises the body portion a, which may be of metal or hard rubber, having at one end 40 the socket b, which is designed to receive the end of the pencil, and the inner end of this

socket is tapered, as shown at c, to receive the point of the pencil and protect the same. The other end is provided with the coneshaped bore or recess d, having a side slit in 45 which is arranged the blade B, of known construction, and by which the pencil may be sharpened by inserting the end of the pencil therein in the usual manner and revolving it.

C is an eraser secured in an annular groove 50 f in the outer end of the device and projecting beyond the edge thereof, as shown.

The device is durable, and it can be manufactured at such a trifling cost as to bring it within the reach of all, and it will be found 55 a most useful attachment to a pencil, or it may be carried in the pocket for use at any time. It may be made in different sizes to adapt it to any size of pencil and may be made as fanciful or ornamental as may be desired. 60

What is claimed as new is—

A combined pencil-sharpener, point-guard and eraser all in a single device consisting of a body portion with tapered bore at one end with a knife arranged in a slit therein, a bore 65 at the opposite end with cone-shaped inner end, and a cylindrical portion of less diameter between the tapered bore and coneshaped portion whereby the tapered portion of the pencil is held by said cone-shaped por- 70 tion and the point prevented from contact with the walls of the cylindrical portion of less diameter, and an eraser seated in an annular groove at one end of the body portion, substantially as shown and described.

In testimony whereof I have signed this specification in the presence of two subscrib-

ing witnesses.

JAMES O. GRAVES.

Witnesses: JACOB H. WOODBURY, ROBERT J. BROWN.