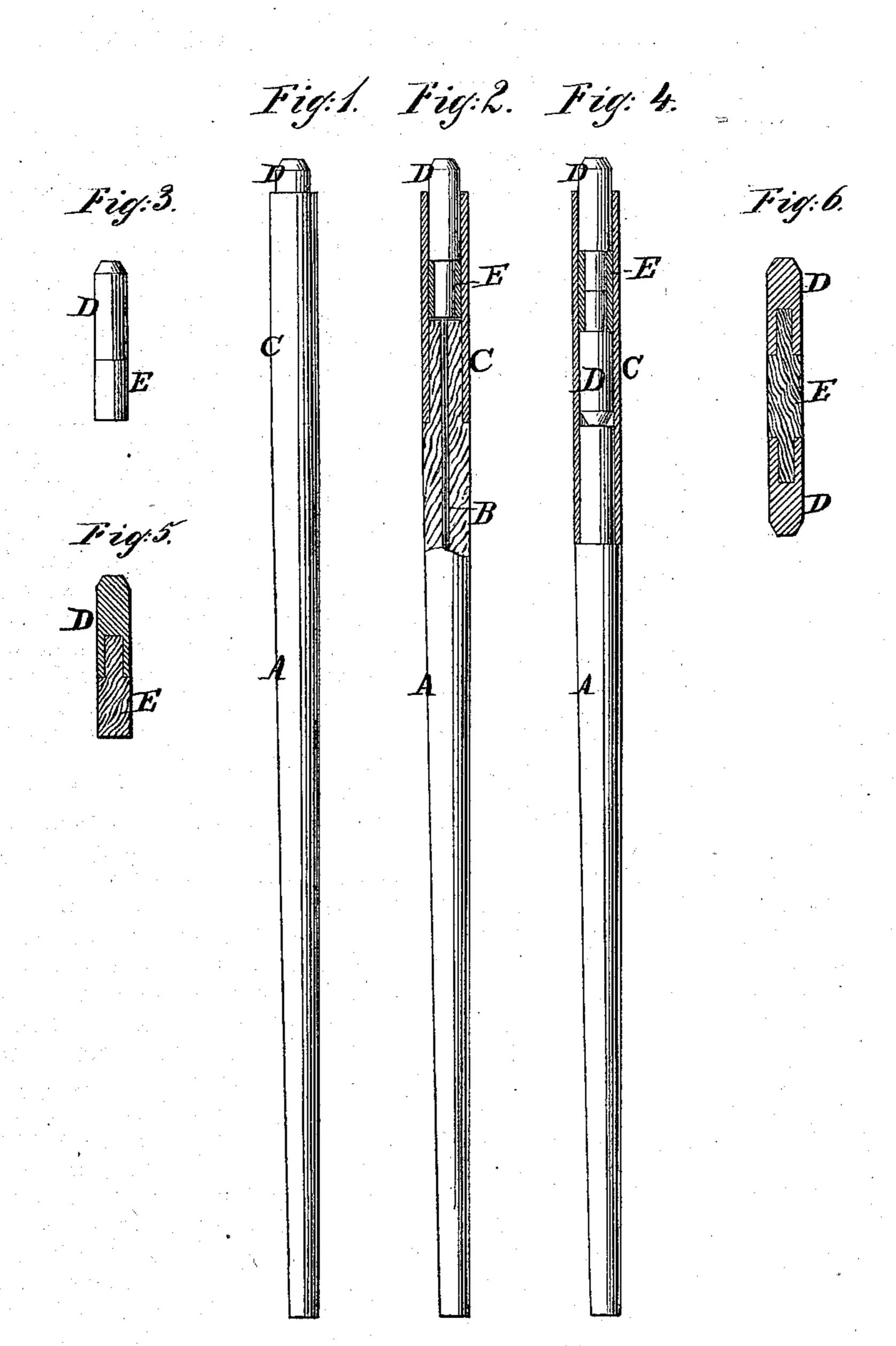
## WILLIAM K. EVANS.

## Detachable Erasers for Pencils.

No. 126,792.

Patented May 14, 1872.



Witnesses: M. Stauff, Ernst Bilhuber. Inventor

## UNITED STATES PATENT OFFICE.

WILLIAM K. EVANS, OF NEW YORK, N. Y.

## IMPROVEMENT IN DETACHABLE ERASERS FOR PENCILS.

Specification forming part of Letters Patent No. 126,792, dated May 14, 1872.

To all whom it may concern:

Be it known that I, WILLIAM K. EVANS, of the city, county, and State of New York, have invented a new and useful Improvement in Pencil-Erasers; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which drawing—

Figure 1 is an outside view of a pencil provided with my improvement. Fig. 2 is an axial section of part of the same. Fig. 3 is an outside view of the eraser removed from the pencil-tube or receiver. Fig. 4 represents my improvement, partly in section, where one end of the eraser is made for erasing ink-marks and the other for lead-pencil marks. Figs. 5 and 6 are modifications of my invention.

Similar letters indicate corresponding parts. This improvement relates to pencil-erasers, as will hereinafter be more fully set forth.

The eraser is provided at its inner end with a case or zone, of paper or other suitable material, and is then inserted into the tube or receiver, so as to leave the working end to project the proper distance. As the working end of the eraser is worn away the tube or receiver is cut away accordingly as the eraser is shortened. The zone or case on the eraser prevents the eraser from working out of the tube or receiver, as it is liable to do in use when placed in the tube unfastened and without a case, the band or case serving to keep that part of the eraser to which it is connected, or which is incased by it, stationary in the tube or receiver, and prevent it from being influenced or bent when pressure is made on the operating end of the eraser. Such pressure, when an elastic eraser is inserted naked in a tube or receiver, and left there uncemented or unfastened so as to be removable, will have the effect of producing motion to a greater or less extent also in that portion of the eraser which is contained in the tube or receiver, and the resiliency of the eraser, acting against the inside of the tube or receiver, will cause the eraser to work outward automatically. The zone or case on the eraser can be modified in various ways without departing from my invention—as, for instance, it can be in the form of a cap or socket to receive the

end of the eraser, or it can be a disk fastened to the end of the eraser in any convenient way.

I do not wish to confine myself to any particular form of case or zone for the eraser, nor to any particular material, as it can be made of paper, wood, or other material less elastic than the substance of which the eraser is composed. Nor do I wish to confine myself to any particular location of the case or zone on the eraser. In double erasers, where one end is made to erase lead marks and the other to erase ink-marks, it can be placed centrally and serve also to confine the ends which come together, while in single erasers it can be placed on or at the end with advantage.

The case or zone is applied to the eraser so as to be flush or nearly so with its exterior. The eraser, being removable from the tube or receiver at pleasure, as above explained, is also reversible, and consequently the eraser can be drawn out and replaced in the tube in a reversed position, so that either end of the eraser

can be presented for use.

The letter A designates a wooden pencil provided with lead B. The pencil can be of the same diameter throughout; or may be conical, as shown in this example, or otherwise formed, as may be desired. To the but end or "head" of the pencil I attach a tube, C, in a permanent manner, which tube should be of some material that can be cut away or shortened as occasion may require, and I prefer to make the same of paper. The tube C constitutes a receiver for the removable eraser; and I prefer to fit it flush with the exterior of the pencil, and to finish both the tube and the pencil in the same manner or style. The letter D, Figs. 2 and 3, designates a rubber eraser of a suitable diameter and shape to allow it to go into the tube or receiver C. Around the eraser I place a zone or stiff case or band, E, of paper or other suitable material, arranged (see Fig. 2) on that end of the eraser which is not to be used as the operating end, and the eraser is then placed in the tube or receiver C without being fastened therein. The case or band is flush with the outside of the eraser, and fits snugly in the tube or receiver C.

An eraser made in this way can be reversed in the tube or receiver when not in use, so that the end covered by the case or zone shall be outside or exposed, whereby the operating end,

being wholly concealed, will be kept clean and free from dirt, and the pencil-case can be thus carried in the pocket or be exposed on the table without the working end of the eraser be-

ing liable to become soiled.

In Fig. 4 I have shown the eraser constructed with an ink-eraser at one end and a leadpencil-mark eraser at the other end, the inner ends of the different erasers being brought together and embraced by the case or zone E, which not only keeps them together, but holds them in such a manner that, when placed in the tube or receiver C, the eraser will not work

out by use.

An artist's pencil—that is to say, a hollow cylinder with a point of bone or metal for holding lead-may be constructed of paper or other material in one long tube, one end for the pencil-point, the other to hold a removable eraser incased and applied according to my invention.

My invention can be modified in various ways-as, for example, I can make the case or zone E in the form of a cap, so as to inclose the end of the eraser when it is applied to the end. Or it can be made in the form of a disk,

as shown in Fig. 5, permanently secured to the end of the eraser by means of a tenon inserted in a socket in the eraser or by any other suitable means.

What I claim as new, and desire to secure

by Letters Patent, is—

1. A removable rubber eraser provided with a case or zone, substantially as shown and described, combined with a lead-pencil by means of a tube or receiver, of paper or other suitable material, for receiving such removable eraser therein, substantially as and for the pur-

pose set forth.

2. The combination, with a lead-pencil having an open tube or receiver, of paper or other suitable material at its head, of a removable ink and lead mark eraser connected end to end by a case or zone, substantially as shown and described, so that the eraser can be inserted in the tube or receiver and be reversible therein, and be so held by the case or zone that it will not work out of the tube automatically, substantially as set forth.

WILLIAM K. EVANS. Witnesses:

W. HAUFF,

E. F. KASTENHUBER.