No. 772,177. PATENTED OCT. 11, 1904.

C. F. W. RAMUS.

EYE BRUSH.

APPLICATION FILED NOV. 25, 1903.

NO MODEL.

Fig. 1

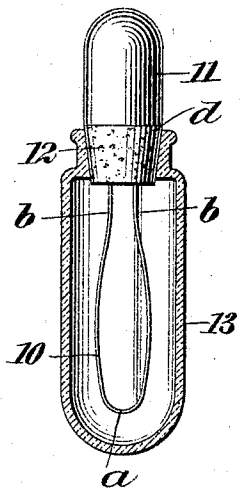


Fig. 2,

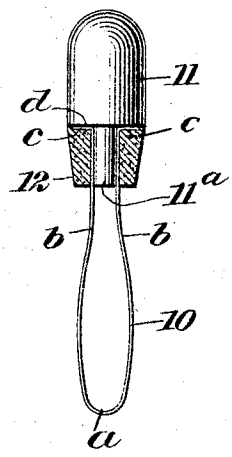


Fig. 5.

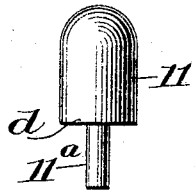


Fig. 3,

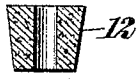
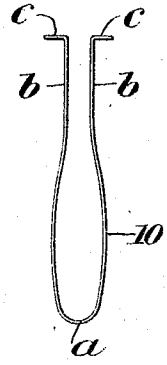


Fig. 4,



WITNESSES:

Edward Thorpe.

Wm. L. Patton

INVENTOR

Christian F. W. Ramus

BY Munn & Co

ATTORNEYS

PHOTO-LITHOGRAPHED BY SACKETT & WILHELMS LITHO. & PTG. CO., NEW YORK.

No. 772,177. Patented October 11, 1904.

UNITED STATES PATENT OFFICE.

CHRISTIAN F. W. RAMUS, OF EAST BOSTON, MASSACHUSETTS.

EYE-BRUSH.

SPECIFICATION forming part of Letters Patent No. 772,177, dated October 11, 1904.

Application filed November 25, 1903. Serial No. 182,617. (No model.)

To all whom it may concern:

Be it known that I, CHRISTIAN F. W. RAMUS, a citizen of the United States, and a resident of East Boston, in the county of Suffolk and State of Massachusetts, have invented a new and Improved Eye-Brush, of which the following is a full, clear, and exact description.

The accidental entrance of sparks, dust, and various other kinds of foreign matter into the eyes of a person frequently occurs and causes great suffering, which continues until the foreign substance is removed.

The object of my invention is to provide a novel simple device, quite small and portable, and that may be readily applied for the removal of foreign matter from the human eye either by the one afflicted or by another person and that will quickly remove the foreign matter without the slightest injury to or further irritation of the eye.

The invention consists in the novel construction and combination of the several parts of the device, as is hereinafter fully described, and defined in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a side view of the improved eye-brush and a sectional side view of a casing therefor. Fig. 2 is a partly sectional side view of the brush removed from the casing. Fig. 3 is a sectional side view of a clamping-ring employed. Fig. 4 is a detached side view of the brush-filament bent into proper form, and Fig. 5 is a detached side view of the brush-handle.

The brush proper consists of a single filament 10, that may be a portion of a hair from a horse's mane or tail or a bristle from the body of a hog, either being available if long enough. A handle 11 is provided, which may be in the form of a short cylindrical billet, as shown, rounded at one end and reduced in diameter at the opposite end to produce a central cylindrical shank 11^a thereon. A clamping-ring 12 is fitted closely upon the shank 11^a and preferably is equal in length therewith, exteriorly tapering slightly toward the free end, and for effective service said ring is formed of a suitable slightly-yielding material. The filament 10 is of such length as will permit it to be doubled and provide a loop *a* at its center of length and two members *b b*, which terminate in oppositely-bent limbs *c c*. The members *b* are passed through the ring 12, and the resilience of the loop *a* holds said members in contact with the inner wall of the ring at opposite points, and the limbs *c c* seated upon the adjacent end wall of the ring. The shank 11^a is now inserted into the ring 12 and bears upon the members *b* of the looped filament 10, and when the shank is forced completely through the ring the shoulder *d*, that is formed by a diametrical reduction of the handle-body 11 to form the shank 11^a, will bear upon the limbs *c* of the filament and clamp them against the end wall of the ring 12, thus connecting the brush-filament with the handle in a secure manner and adapting the looped portions thereof to project therefrom for service when the handle is manipulated. The looped filament 10 is protected from injury by provision of a casing 13, that is formed of suitable material, is cylindrical, and closed at one end, the open end of the casing being shaped to receive the ring 12, which when the filament is fully inserted within the casing may be pressed into said end of the casing, and thus retain the latter in connection with the handle.

It has been found that the surface of a hair of the kind specified if looped and passed over the ball of a human eye will not give the least discomfort, but will engage with and hold any gritty substance that is floating in the eye, and by proper manipulation the looped hair will remove the foreign matter quickly.

While a filament such as the hair of an animal is preferred for the formation of an eye-brush such as has been described, it is not my intention to limit the construction of the device to the employment of such material only, as it is feasible to use a fine vegetable filament or a fine wire of metal for the purpose specified, and in case there are particles of iron or steel lodged in the eye of a person a small magnetized loop of fine steel wire may be employed for the removal of the fragments of metal from the eye and effect the desired result expeditiously and without pain.

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

1. An eye-brush, comprising a looped filament, a handle having a shank projected at one end, and a ring mounted upon said shank, the ring embracing the end portions of the looped filament and holding said ends clamped upon the shank.

2. An eye-brush, comprising a looped filament having short limbs formed on the end portions thereof and projected oppositely, a cylindrical handle having a diametrically-reduced shank projected from one end thereof, a slightly-pliable clamping-ring mounted upon the shank and clamping the members and limbs of the looped filament upon the shank, and a casing closed at one end and engaging with the ring after the looped filament is inserted therein.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHRISTIAN F. W. RAMUS.

Witnesses:
CHARLES A. SAWYER,
A. COLEMAN FISHER.