APPLIANCES
CERTAIN MODIFICATIONS IN MINOR LACRIMAL INSTRUMENTS*†
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The syringing and probing of the tear duct is often handed over in hospitals to juniors, and as a result any complaints about instruments are apt to be regarded as a sign of inexperience. The therapeutic effectiveness of the methods in adults are in any case open to argument, but there is no doubt of their diagnostic value and they can be facilitated in execution by the use of the following slight modifications in the instruments employed.

(1) Cannula.—The lacrimal syringe cannula should be narrowed to \( \frac{55}{5} \) mm. (\( \approx 24 \) S.W.G.) diameter and shortened to \( \frac{5}{12} \) in. length.

   It should be attached (as has been standard practice in America for a long time) to a Luer-Lok syringe which prevents “blow-back” (Fig. 1).

(2) Punctum Dilator.—This should be made of stainless steel, as brass ones become blunt and “non-stainless” ones rust. It should have added to its opposite end a very fine pointed dilator for dilating minute puncta; this was described by Percival Hay some years ago as a “finder”. The fine point is protected by a screw-on cap (Fig. 2).

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† These instruments have been made for me by Down Bros., and Mayer and Phelps Ltd., 32 New Cavendish Street, London, W.1.
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(3) Probes.—These have been made of stainless steel which keeps its form during and after use and is better than the conventional silver. They should be modified to the form employed by Maddox in his hollow suture-passing probe. This has a grooved disc-shaped handle which can be firmly held by the finger tips and controls the movements of the probe in three dimensions much better than the small plate on the usual more or less straight probe (Fig.3). The probe with the Maddox curve seems to find its own way with much less conscious manipulation than the Bowman or Liebreich type. It can be used on babies as well as on adults and is particularly convenient for defining the internal punctum in dacryocystorhinostomy. Owing to the existing confusion in the standardization of probe sizes, the obverse side of the handle has been marked with the diameter in millimetres. The diameters range from 0.6 mm. at intervals of 0.2 mm. to 1.4 mm., which is the greatest size to which the punctum can be dilated.

0.6 mm., 0.8 mm., and 1.0 mm. probes are much more useful than the larger ones as it is rare to find a punctum which will sustain full dilatation without rupture.

![Stainless steel lacrimal-duct probes (0.6 and 1.4 mm. diameter).](image-url)