Using a mouse-toothed forcep and a small, sharp-pointed pair of scissors, I dissect off a strip of mucous membrane from the inner side of each lip of the opened canaliculus, leaving about 1 mm. of mucous membrane on each lip at the end to form the new punctum. Also leave a strip at the bottom of the slit to form the lumen of the new canaliculus. Bring the raw surfaces together with sutures.

I remove the sutures after four days, and wait a week longer to allow the union to become firm, before testing for results by probing.

I report a case in which the canaliculi were especially mutilated, on which this operation was performed:

Mrs. L., 23, came with the request that I probe her right duct to relieve tearing. On examination, I found that both canaliculi had been slit completely from one punctum to the other, leaving a gaping, horse-shoe shaped opening, thru which I could look into the lacrimal sac. The nasal duct was patulus, allowing water to pass down freely; in fact, air was forced into the patient's eye when she blew her nose. The cause of the tearing was evidently the destruction of the suction of the lacrimal sac, due to the wide open canaliculi.

I performed the operation for restoration as just described, freshening the edges of both canaliculi around the bend of the horseshoe, uniting the two lips with three sutures.

The following results were obtained: The new puncta and canaliculi will just pass a No. 5 Bowman probe without force. The puncta lie in proper position. The disagreeableness of forcing air into the eye from the nose is relieved. The normal function of the lacrimal apparatus is restored and the patient is relieved of tearing.

PAINLESS SUBCONJUNCTIVAL INJECTION.

C. ARBUTHNOT CAMPBELL,
Steubenville, Ohio.

This is a report of a painless technic for giving subconjunctival injections that I have used in a number of cases with gratifying results.

The therapeutic value of subconjunctival injections of various drugs in various conditions is beyond the domain of this report. The technic to be described I have used in children from seven years of age to adults beyond sixty years of age, and their statements have always been the same: "It was painless." The hypersensitive will manifest their condition with some complaint when they discover that their "eye is to be injected," but our experience must allay their phantasms.

All solutions used must be freshly prepared, otherwise a precipitate may occur. Especially is this liable to occur with the cyanid of mercury when it is the active drug. The solutions and syringe should be sterile. The bulk of fluid injected depends on the operator, but when large quantities are to be used, it is better to employ the procain as an anesthetic than cocain. My anesthetics of choice are cocain hydrochlorid 1.5 per cent, or procain 2 per cent, aqueous solutions. The following active drugs I have used: normal salt, hyper- and hypotonic salt, dionin and cyanid of mercury.

In detail it is as follows: To the fresh sterile solution of the active drug add fresh sterile solution of the anesthetic. I do not boil them together for sterilization. The procain or the cocain may be in strong enough solution, so that one or two drops may only be necessary to be added, to the active drug solution, thus having no appreciable diluting effect on it, and at the same time giving it a 2 per cent procain or a 1.5 per cent cocain. The conjunctival sac is now anesthetized by putting in it one drop of a 4 per cent cocain solution, repeated every two minutes for four applications. Then with the sterile syringe inject the desired solution *slowly*. It is not necessary to give morphin or codein. No special after care is necessary.

I will appreciate knowing of any failures with the above technic.