weeks it is for the moſt part as large as it was previous to the operation. Whether this be owing to a renewal of the vitreous humour, or merely an aqueous ſecretion, is not yet determined ; though the latter circumſtance is generally suppoſed.

Chap. XIV. *Of Fistula. Lachrymalis.*

By this diſeaſe is properly underſtood a ſinuous ulcer of the lachrymal ſac or duct with callous edges, though every obſtruction of this paſſage is commonly called *fistula lachrymalis.*

The firſt and moſt simple ſtate of the diſeaſe is that term­ed a *dropsy of the lachrymal sac.* The ſymptoms are, a tu­mor between the inner cornea of the eye and ſide of the noſe. This diſappears by preſſure, the tears mixed with mucus paſſing partly into the noſe, but chiefly back upon the eye and over the cheek.

This ſtate of the diſeaſe is what the French have called the hernia, or *hydrops sacculi lachrymalis.* It is frequently met with in children who have been rickety, or are ſubject to glandular obſtructions : and in this ſtate it ſometimes re­mains for ſeveral years, ſubject to little alterations, as the health or habit ſhall happen to vary, the ſacculus being ſometimes more, ſometimes leſs full and troubleſome ; the contents which are preſſed out are ſometimes more, ſome­times leſs cloudy ; and now and then the diſeaſe is attended with a flight ophthalmy, or an inflammation of the eyelids, but which, by common care, is eaſily removed. It the ſac­culus be not much dilated, the diſcharge ſmall, and produ­ced only by preſſure, the chief inconveniences are the weep­ing eye, and the gumming together of the lids after ſleeping : but theſe, by being attended to, may be kept from being very troubleſome ; and if the diſeaſe makes no fur­ther progreſs, may be ſo regulated as to render any more painful proceſs totally unnecessary. If the dilatation be con­ſiderable, the ſwelling is more viſible, and the quantity of fluid is larger ; it is alſo in this ſtate more frequently mixed and cloudy, and more troubleſome, from the more frequent neceſſity of emptying the bag ; but if the patient be an adult, it may, even in this more dilated ſtate of it, be kept from be­ing very inconvenient.

If an inflammation comes on, the tumor is thereby conſiderably increaſed, the diſcharge is larger, as well during ſleep as upon preſſure ; the ſkin covering it loses its natural whiteneſs and ſoftneſs, becomes hard, and acquires an infla­med redneſs ; and with the tears a mixture of ſomething, which in colour reſembles matter, is discharged, eſpecially if the preſſure be made with any force, or continued for any time.

When the parts are in this ſtate, the contents of the bag have ſo much the appearance of purulent matter, that they are now generally conſidered as ſuch, though Mr Pott and ſeveral others have been of a different opinion, conſidering the fluid as merely mucus under a different form ; allowing, however, that pus is ſometimes discharged. If the puncta lachrymalia be naturally large and open, and the inflamma­tion confined to the ſurface of the ſac, its contents will paſs off pretty freely, and the ſkin will remain entire.

But when the ſkin covering the lachrymal bag has been for ſome time inflamed, or ſubject to frequently returning inflammations, it moſt commonly happens that the puncta lachrymalia are affected by it, and the fluid, not having an opportunity of paſſing off through them, diſtends the infla­med ſkin ; ſo that at laſt it becomes ſloughy, burſts exter­nally, and forms an opening in the moſt prominent part of the tumor, at which the tears and matter contained in it are discharged. When the opening thus formed is ſmall, it commonly heals again in a few days, but it burſts as ſoon as a conſiderable quantity of this fluid is collected ; and it conti­nues thus to collect and burſt alternately, till the opening be­comes ſufficiently large to prevent any farther collection. This ſtate of the diſorder exhibits exactly the appearances of a ſi­nuous ulcer, with callous, and ſometimes with retorted edges ; and this ſtage forms properly the real fiſtula lachrynalis. Tears, mucus, and purulent matter, are now abundantly diſcharged from the ſore. When the bone beneath is ſound, this diſcharge is ſeldom either acrid or offensive to the smell, for the opening being in general in the under part of the tumor, the matter is readily evacuated ; but when any of the contiguous bones are carious, they are not only found to be ſo by the introduction of a probe, but by the appearance, ſmell, and effects of the matter upon the neighbouring parts. In this caſe it is thin, fetid, and commonly ſo acrid as to fret and corrode the integuments moſt contiguous to the ulcer ; and when the diſorder is connected with ſcrophula or with lues venerea, which is by no means an unfrequent occur­rence, the diſcharge and appearance of the ſore will vary according as it happens to be combined with one or other of theſe diſeaſes.

From what has been ſaid, we may divide this diſeaſe into four general heads or ſtates, under which all its more minute diſtinctions may be comprehended. The firſt conſiſts in a simple dilatation of the ſacculus and obſtruction of the naſal duct, discharging, upon preſsure, a fluid either quite clear or a little cloudy ; the ſkin covering the bag being entire and perfectly free from inflammation. In the second, the tumor is ſomewhat larger ; the ſkin which covers it is in an infla­med ſtate, but entire ; and the diſcharge made through the puncta lachrymalia is of a pale yellow or purulent colour. In the third, the ſkin covering the ſacculus is become ſloughy, and burſts ; by which means the ſwelling is in ſome meaſure leſſened : but the matter which, while the ſkin was entire, uſed to be preſſed out through the puncta lachrymalia, now diſcharges itſelf through the new aperture. The ductus ad nares, both in this and the preceding ſtate, are not other­wiſe diſeaſed than by the thickening of its lining. In the fourth, the paſſage from the ſacculus lachrymalis into the noſe is totally obliterated, the inside of the former being ei­ther ulcerated or filled up with a fungus, and attended sometimes with a caries of the bone underneath.

In the firſt and moſt simple ſtate of the diſeaſe, viz. that of mere obſtruction without inflammation, much pains have been taken to reſtore the parts to their natural ſtate and uſe, without making any wound or diviſion at all. The intro­duction of a probe, the injection of aſtringent fluids, and a conſtant compreſſion made on the outſide of the ſacculus in the corner of the eye, are the principal means by which this has been attempted.

Several years ago, M. Anel made a probe (fig. 37.) of ſo ſmall a ſize as to be capable of paſſing from the eye­lid into the noſe, being introduced at one of the punctalachrymalia, and paſſing through the ſacculus and duct ; with which probe he propoſed to break through any ſmall obſtruction which might be found in its paſſage. He alſo invented a ſyringe (fig. 38.), the pipe of which is ſmall enough to enter one of the puncta, and thus furniſhes an opportunity of injecting a liquor into the ſacculus and duct ; and with theſe two inſtruments he pretended to be able to cure the diſeaſe whenever it conſiſted in obſtruction merely, and the diſcharge was not much discoloured. The firſt of theſe, viz. the paſſage of a ſmall probe through the puncta, has a plauſible appearance ; but will, upon trial, be found very unequal to the talk aſſigned : the very ſmall ſize of it, its neceſſary flexibility, and the very little resistance it is ca­pable of making, are manifeſt deficiencies in the inſtru-