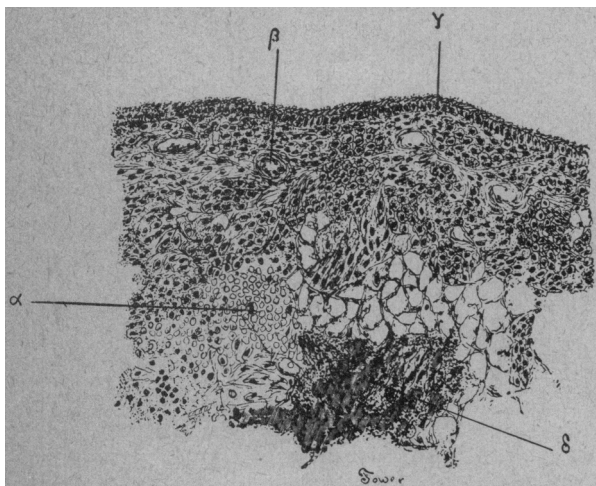


following manner: after the eye was thoroughly cocainized, at a distance of  $1\frac{1}{2}$  mm. from the corneo-sclero junction I made a linear incision, passing partially through the base of the tumor. With an iris forceps I attempted to seize the mass but it being so fragile, only small particles could be removed; with a platinum loop I made similar attempts with the same results, it being very evident that the iris was attached to the capsule of the lens. With an iris forceps armed with a double row of teeth I seized the iris on either side of the tumor and with some little effort withdrew the large mass and attached portion of the iris out of the anterior chamber, which mass was then excised as close as possible to the base. (There still remained some parts of the growth broken off by the manipulations, in the anterior chamber.) After the growth and the attached portion of the iris were excised there followed a severe hemorrhage. After the hemorrhage had ceased and the lips of the wound were adjusted, I applied a pressure bandage and put the patient to bed. During the healing process the eye showed but very little reaction and on April 23, 1893 the patient was discharged with tension normal and, with the exception of a small zone, the former corneal haziness had disappeared, some pigmented spots upon the capsule in the coloboma, lower temporal quadrant of disc pale, retina changes disappeared and vision 20-30.



DESCRIPTION OF PLATE.

- A. Small hemorrhage in growth just above iris in loose connective tissue, showing very plainly the blood corpuscles.
- B. Blood vessel. One of many which are seen scattered throughout and containing blood corpuscles.
- C. Surface of growth showing covering cells.
- D. Portion of iris from which the tumor probably originated.

The tumor measured 7 mm. in its longest diameter, 5 mm. in its shortest and 3 mm. in thickness; its superficial surface was uneven grayish-white, with the base showing normal appearance of iris. After its removal the tumor was placed in a sodium-chlorid solution, and shortly afterwards given to Dr. Tower of Milwaukee, for microscopical examination, who reports as follows:

"I took small particles, every precaution being taken to prevent them from being contaminated and planted them in tubes of agar, blood-serum, gelatin, and in bouillon both acid and alkaline, and kept them at 37 degrees centigrade and also at about 20 degrees centigrade for several days, and was unable to get any growths except in one tube a little penicillium which was a contamination from without, either from the air or some of the utensils used. I examined

stained preparations for the tubercle bacilli with negative results; in fact, did not find any germs at all or evidence of them.

"I have made examinations directly of small portions when fresh, under the microscope, and found a connective tissue and epithelial growth from apparently the iris. Upon section and examination, I find the growth to be a papilloma originating from the sub-epithelial connective tissue of the iris."

We understand by a papilloma, a neoplasm composed of connective tissue with epithelial covering; with very complete vascularization, resembling in construction skin, intestinal and mucous membrane papillae (Wagner). Papilloma start usually from an injury, producing increased circulation to the part, causing a similar irritation to that produced by dirt in the formation of warts and by decomposing glandular secretions in the formation of condylomæ. Such a papilloma may originate in any tissue as they are found in paroöphoron, cystic tumors of broad ligament (Mouillin), the skin, tongue, larynx, conjunctiva, fore-skin, glans penis, rectum, synovial membranes. If the tumor under consideration was of leprous, tuberculous or actini-mycotic growth, the germs characteristic of these growths would have been found. If it had been any of these, or a syphilitic growth or a rhino-sclerotic, the particles remaining in the anterior chamber would have developed into a new growth.

I consider the prognosis in this case very favorable; especially on account of the age of the patient if there were particles remaining there would be no probability of the formation of a villous carcinoma, into which the papilloma sometimes develop.

## THE CLASSIFICATION OF DISEASES OF THE EYE FOR HOSPITAL STATISTICS.

Read in the Section on Ophthalmology at the Forty-fourth Annual Meeting of the American Medical Association.

BY EDWARD JACKSON, A.M., M.D.

PROFESSOR OF DISEASES OF THE EYE IN THE PHILADELPHIA POLYCLINIC;  
SURGEON TO WILLS EYE HOSPITAL.

The custom has become general among hospitals and dispensaries, of publishing Annual Reports, showing the number of cases treated. The principal value of such statistics, from the scientific point of view, is that they may throw light on the etiology of certain diseases, by showing their comparative frequency in different places and at different times. This can only attach to such statistics when the classification they employ is comparatively uniform, and their value, as well as the ease with which they can be handled in combination, will be enormously increased if the classifications be exactly uniform.

On consulting the reports of the principal ophthalmic hospitals of the country, it will be found that in the main they pretty closely agree as to the naming and relative frequency of the mass of conditions mentioned. There are, however, points of divergence which render the comparison of statistics obtained in the different large cities difficult and often valueless.

To elicit discussion, as well as to urge their importance, certain characteristics of a good classification may be mentioned.

First, it must not be so minute as to be seriously burdensome. With the future development of ophthalmic science, it will be possible, perhaps, to bring

together in our hospital reports many facts that we are now unable to handle with advantage. Subdivisions that are now of great practical clinical importance to the individual surgeon, have not been so widely accepted as to make it possible to enforce them in the reports of many ophthalmic hospitals. And while, individually, we may greatly desire that statistics with reference to this or that special point might be widely accumulated, the burdening of any common scheme with the subdivisions necessary for that purpose would prevent its general adoption.

In the second place, the scheme must have an entirely definite rigid basis, natural so far as possible, but when necessary, arbitrary. There has been widely adopted the plan of general classification upon an anatomical basis; thus we have one great class of diseases of the cornea. Another class for those of the lens, and another for the optic nerve and retina and so on. Then within these general classes, individual conditions are recognized upon a clinical or pathological basis. This general method of classification, we may regard as already adopted by common consent. The difficulty comes in with reference to the choosing of the special characters on which the division into individual conditions shall be determined.

It seems the essential point that must be recognized here, is that there must be no overlapping. For instance, take the classification of iritis; cases of this disease may be classified clinically, as serous, plastic, and purulent; but again they might be classified etiologically, as syphilitic, rheumatic, idiopathic, secondary, and traumatic, and such a classification is frequently adopted, but to recognize all these classes as subdivisions of iritis is to introduce confusion and render your statistics worthless.

One surgeon will be certain to place the mass of his cases in the column of plastic, although a large portion of these may be of syphilitic origin, and another surgeon will record them as syphilitic, although they may all be plastic in their clinical character. In either case, the statistics of one surgeon will be utterly worthless to the other, or utterly worthless for combination with those of the other at the hands of third parties. The only way possible to introduce the different sorts of classification, as clinical and etiological, is to make the one subordinate to the other. As under the head of plastic iritis, to recognize syphilitic or rheumatic as varieties, and to recognize the same varieties under the heads of serous or purulent. But in the general scheme this must be done very sparingly, if at all, on account of the enormous extension of the list that it will entail. Individual reporters may indulge in it to any extent, provided they make their main groups conform strictly to the general scheme. Regarding the case of traumatic affections, there is less danger that cases of such origin will be placed under some other head, so that some departure from the strict single basis of classification may be possible in regard to them.

One of the most difficult questions to deal with in this connection is that of the duplicate representation of cases. The question as to whether each case shall appear only under some single head, or whether it shall be represented under the head of every pathological condition present that is given place in the general scheme.

If statistics are to be used to determine the rela-

tive frequency of certain conditions, then every occurrence of such a condition, whether alone or in conjunction with other diseases, should be reported. And probably this would be on the whole the best method of working. If we could only be sure that it was always carried out very little could be said against it. With some conditions as, for instance, persistent hyaloid artery or coloboma of the iris, there is little likelihood of omission. But in the cases of ametropia and heterophoria, conditions that are present in some degree in almost every case, it is not at all likely that they will always be recorded; with these and to a less extent with many other conditions, the relative proportion will necessarily vary with the predilection of the observer. Still this would be largely true, with the plan of giving to each case but a single diagnosis so that, on the whole, it seems best to give up any attempt at making the number of cases balance the number of diagnoses, or the number of patients balance the number of pathological conditions present.

With regard to nomenclature, the writer would favor the adoption of strictly English names throughout, merely adopting foreign terms or anglicizing where this is necessary. In most of the hospital reports the mass of terms are already English; very few attempt to give them all in Latin.

Where two or three different terms are in common use to designate the same condition, it will in some instances be necessary to include more than one, but this should be placed, not as distinct conditions, but as a synonym on the same line, so as not to allow one observer to report his cases under one title and another to report the same class of cases under another title.

Whatever system of classification is adopted, it will in the end be most successful if it be one that is capable of future development, without radical rearrangement or dislocation of its parts. For this reason, perhaps more than for any other, it should at first be simple, and attempt very little refinement, the main point now being to arrange principal groups, so that they will not need future alterations. Subdivision within these groups can be carried on by future conferences, or even may be allowed development at the hands of individual surgeons; since for purposes of comparison these subdivisions may at any time be thrown together, if only there is strict agreement as to the main grouping.

## ULCERS OF THE CORNEA.

Read before the Colorado State Medical Society, June 20, 1893.

BY WILLIAM C. BANE, M.D.

DENVER, COLO.

Late Lecturer on Diseases of the Eye and Ear in the Medical Department of the Western University of Pennsylvania; Ophthalmologist to the Chair of Neurology, and Chief Clinical Assistant in Ophthalmology and Otology in the Medical Department of the University of Colorado; Ophthalmologist and Otologist to St. Anthony's Hospital and the House of the Good Shepherd.

The importance of this affection, I believe, justifies a brief review of the subject:

Corneal affections constitute over one-fifth of the eye cases that come under our care.<sup>1</sup>

Of the three principal types of inflammation of the cornea, ulceration is the most common. The numerous varieties of corneal ulcers have been conveniently grouped as superficial and deep.