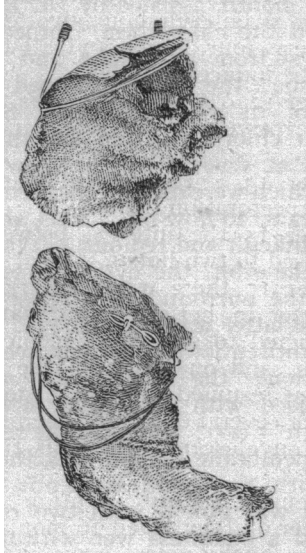


dose was continued for several days, but at longer intervals. At my visit on the morning of the 26th a devoted woman who had assisted in nursing the children handed me a piece of dried membrane about $2\frac{1}{2}$ inches in length, the upper portion seemingly about two-thirds the circumference of the trachea of a child of that age. She stated that it, with about as much more, had been ejected after a violent fit of coughing and in which she thought the child would certainly die.



False membrane ejected on tenth day by Nellie Hunter, aged 16 months, December 26, 1888, after seventy-two consecutive hourly doses of one-eighth grain each of mercuric bi-chloride. Recovery complete.

After putting the specimen in alcohol I showed it to a physician, who thought he could see six impressions of tracheal rings. In the upper and broader portion three rings are beautifully and distinctly outlined. The membrane is of the thickness of heavy blotting paper. The hoarseness was materially benefited by a saline vapor from a large kettle upon the grate. By this means the atmosphere of the room was subsequently kept moist. The mercury was continued in $\frac{3}{8}$ grain doses morning and evening for several days and then withdrawn. The convalescence from this time was uninterrupted.

It may be well to state that after the ejection of the membrane by Nelly both children were given, because of cardiac indications, three-drop doses of tincture of digitalis every six hours.

January 24, 1889. Both children have made good recoveries.

THE Chief of Police of Berlin has ordered the hospital authorities to note the numbers of the carriages in which patients are taken to the hospitals, and the nature of the diseases of the patients. When the patients are suffering from infectious or contagious diseases the carriages are to be disinfected.

RECURRENT FATTY CYST OF THE ORBIT.

GROWING FROM THE EXTERNAL SHEATH OF THE OPTIC NERVE.
REMOVED MAY, 1878, AND AGAIN, JANUARY, 1888.

BY J. H. BUCKNER, M.D.,
OF CINCINNATI, OHIO.

J. O., a young girl, *æ*t. 10 years, was brought to my office in the early part of May, 1878. A soft elastic tumor projected from the external canthus of her left eye, overlapping and pressing the globe inwards and upwards. The pupil was almost entirely covered by the upper lid on account of the displacement, and her vision in that organ was consequently reduced to a bare perception of large objects. Vision of R. E. normal.

The growth of the tumor had been exceedingly slow, making but little progress for two or three years from the time it was first noticed by her, until a few months prior to her visit to my office, when it began to enlarge more rapidly. Her relatives belonged to the laboring class, and could not give a definite history as to the time of its first appearance; and, as its growth had been so slow after it emerged from the orbit, it had probably started during early infancy, if it was not congenital.



As will be observed by the photographs, herewith submitted, Jessica was a well developed child for her age. The second photograph was taken about two months subsequent to the removal of the tumor, and shows that the displaced eyeball had regained its normal position.

Operation.—About the middle of May, 1878, (my notes do not give the exact date) assisted by Drs. C. S. Muscroft, Jr. and L. McLean Slough, my little patient was anaesthetized with chloroform, and I proceeded in the following manner to remove the tumor. The conjunctiva was slit

vertically over the swelling, and, with probe-pointed scissors, separated from the external portion of the growth, the cyst wall was quite thin and was snipped at one or two points, but, owing to the semi-solid character of the contents, but little was evacuated. I then proceeded to separate the cyst from the globe and surrounding cellular tissue with the handle of a scalpel, and, with the probe-pointed scissors going deep into the orbit. My assistant rotated the ball inwards, until, following the cyst wall, I could feel, with my little finger, the optic nerve, the wall of the cyst partly enveloping it, and being, apparently, a continuation of the external sheath of the nerve. With great care I divided the cyst wall with my scissors as closely as possible to the nerve.



The contents of the deeper portion of the cyst were much softer than the external part, and escaped when the cyst was divided; it was lardaceous in appearance and consistency. The orbital cavity was thoroughly cleansed by syringing with clear, cold water; *no antiseptics being used*. The edges of the mucous membrane were united with three or four interrupted silk sutures, and a compress wet with cold water, applied over the closed eyelids. The cold water dressing was continued for twenty-four hours, there was but little inflammatory reaction, and the wound healed by first intention.

The sac and its contents were sent for examination, to Dr. L. R. Longworth, who was at that time, about eight months prior to his death, an ardent student of pathology and microscopy. He pronounced the contents of the cyst to be chiefly fat and epithelial scales.¹

The vision of Jessica, two months subsequent to the operation, was normal. After the second photograph was obtained, I did not see her until she came to my office in January, 1888. I found the left eye squinting inwards about four lines. Upon raising the upper lids a soft swelling was

discovered, occupying the superior and external angle of the orbit. L. E. V.— $\frac{2}{3}$, R. E. V.— $\frac{2}{3}$. She had first noticed the return of the tumor during the summer of 1887. There was but little exophthalmos, however, the stiffness and immobility of the eye, and the comparatively rapid growth of the tumor, made her anxious to have it removed.

She was admitted to the Eye Ward of St. Mary's Hospital on January 21, and on the 25th of the same month, assisted by Dr. Bertling, who administered the chloroform, I proceeded to dissect the cyst from the globe and surrounding cellular tissue; the cyst enveloped the ball for fully half of its circumference. She behaved badly under chloroform, and the thin cyst wall was clipped at several points, allowing its fluid contents (which were of the consistency and color of thick cream) to flow off. This also made the dissection difficult and tedious.

Deep in the orbit, the cyst was so closely adherent to the surrounding adipose tissue that much of the latter was also removed. The most thorough antiseptic precautions were taken in this operation; the instruments and sponges being cleansed with a solution of bichloride of mercury, 1 to 5,000; and after the removal of all the cystic membrane I could find, the cavity was cleansed with the same antiseptic wash. The conjunctiva was united with two or three silk sutures, and a compress wet with the sublimate solution applied over the closed lids.

The operation was followed by intense inflammation of the cellular tissue of the orbit, of the conjunctiva and of the eyelids. Upon the third and fourth day the swelling of all the tissues surrounding the ball was so great as to prevent the possibility of inspecting the cornea, which I fully expected would slough as the result of the surrounding pressure.

On the second day ice compresses were tried, but finding the application of heat to give greater relief, the hot water dressing was substituted, and continued until the subsidence of the swelling. Four-grain solutions of cocaine and atropine were frequently instilled into the conjunctival sac, and the inflamed tissues were irrigated with the antiseptic wash as hot as it could be borne, every two hours.

There was but little discharge throughout, and on the sixth day the inflammation began to subside by resolution. The only damage to the cornea was a small ulcer near the centre, which soon healed. The ocular conjunctiva, externally and inferiorly, still remains red and thickened. The outward movement of the eye is yet limited, due, probably, to the stretching and weakening of the external rectus. The squint is reduced by measurement to one and a half lines, but she now has diplopia, which did not exist previous to the operation. Her vision remains the same, viz. $\frac{2}{3}$

¹ This case was reported to the Cincinnati Academy of Medicine during the winter following the operation, but, after a careful search of the *Lancet* and *Clinic* of that period, I do not find that it was ever published.

for the left, and $\frac{2}{3}$ for the right eye, with D. 1 Sph. V. L. E. $\frac{2}{3}$. The diplopia is overcome by a prism of 10° , and will, no doubt, be relieved when the exudation, resulting from the inflammation of the orbital cellular tissue, has been absorbed, and the external rectus has regained its normal strength by exercise and contraction. Otherwise the advancement of the external, and tenotomy of the internal rectus may be necessary.

The cyst removed in this case was of the class termed dermoid, the etiology of which is, in a great measure, a matter of speculation. The tendency to recur is a subject of more importance to us. The four cases reported by Dr. Fox, an epitome of which was published in the *Archives of Ophthalmology*, Vol. XIV, do not furnish the requisite data, on account of the shortness of time since the operation, to judge of the efficacy of his method of treatment with nitrate of silver. The same may be said of Thompson's case, treated by electrolysis. I doubt if either method, unless the entire cystic membrane could be reached by the caustic, or cautery, would certainly prevent a recurrence of the tumor. It would, evidently, have been hazardous to vision to have penetrated the orbit to the proximity of the optic nerve, with either of the mentioned caustics, which would have been requisite to success in the case I have just reported.

The analysis of the seventy-three cases, collected and reported by Berlin, quoted by Cornwall as an addendum to the report of his case, published in Vol. XI of the *Archives*, shows the important fact that orbital tumors of this class occur more frequently under 20 years of age, and that a large proportion of them are congenital. If we adopt the invagination theory we must regard all dermoid cysts as having the germ of development at birth.

I regard, as one of the most valuable points for oculists in connection with orbital cystic tumors, to be reliable data from which to estimate the frequency of recurrence under the different methods of treatment. This would be a fruitful field for the investigation of some of the ambitious and younger members of our specialty.

AN INTRODUCTION TO THE STUDY OF PNEUMONIC FEVER.

BY EDWARD F. WELLS, M.D.

SECOND PAPER.—EPIDEMICS.

Pneumonic fever sometimes prevails as an epidemic, and, when wide-spread and very fatal, it naturally attracts the attention of the medical historian. Accounts of such outbreaks come to us from very remote times, although there must always remain a doubt whether the great epidemics of which we read were really pneumonic in their nature.¹

Thus the Plague of Athens, which, after devastating Æthiopia and the Mediterranean countries, destroyed more than one-fourth of the inhabitants of the Grecian metropolis,² has been considered a form of this disease,³ although the wonderfully graphic account of the epidemic left us by Thucydides⁴—himself a sufferer from the malady and one of the few attacked who recovered—scarcely warrants the conclusion.

The victims were generally attacked "suddenly, while in full health, and without ostensible cause. First they were seized with violent flushings about the head, and redness and turgescence of the eyes; within, the fauces and the tongue became all at once blood-red, and the breath unnatural and fœtid. After this came on sneezing and hoarseness; and in a short time the suffering extended down into the chest, with violent cough; and when it settled on the heart it disturbed its action, and produced bilious discharges of all kinds known to medical language, accompanied by great distress. In most cases a dry hiccough came on, causing violent spasms, which sometimes ceased soon, and in other cases lasted a long time. The surface of the body was neither very hot to the touch nor pallid, but rather red, livid, and covered with an eruption of small blisters and sores; while the internal heat was so great, that the patients could not bear upon them the thinnest garment or the finest linen, or to lie in any other way than naked, and had a longing to throw themselves into cold water. Nay, many who were not carefully watched actually did so, into the tanks, urged by an insatiable thirst; and it made no difference what they drank, much or little. They suffered severely from a distressing restlessness and want of sleep throughout. Yet the whole time the disease was at its height, the body was not sensibly emaciated, but held out against all this suffering in a way beyond belief; so that most died about the seventh or ninth day, of inward fever, still retaining considerable strength. Or, if they survived this crisis, when the disease passed into the abdomen, severe ulceration supervening, with profuse diarrhœa, the majority died of this last from sheer exhaustion."

The author goes on to give the sequellæ of the malady, the refusal of birds of prey to touch the unburied dead, the uselessness of preventive and curative treatment, and to state that persons once attacked were proof against subsequent infection.

This strange epidemic was probably an eruptive fever, *sui generis*, with pulmonary symptoms resembling those of pneumonic fever.⁵

¹ Heiss, Inaug. Diss., München, 1857, S. 20, says that the disease is never epidemic, but in this he is clearly in error.

² Smith, History of Greece, N. Y., 1855, p. 289.

³ Sturges, Nat. Hist. Pneumonia, London, 1876, p. 4; Loomis, Pepper's Syst. Med., Phila., 1885, Vol. iii, p. 307.

⁴ Opera, Lib. ii, cap. xlix-li, Collins' Ed., N. Y., 1883, p. 49.

⁵ For further information regarding the nature of this terrible epidemic the reader is referred to Pliny, Nat. Hist., Lib. vii, cap. 50; Aristotle, De Mirabilibus, Sec. 1; Lucretius, De Rerum Natura, Lib. vi, H. 1234 et H. 1241; Hippocrates, Aphor. Lib. iv, aph. 55, et De