stained yellow. A cyst, of the size of a small cocoa-nut, was connected with the left ovary.

REMARKS.—Until the inspection of the body revealed the true nature of the pathological changes in this case, it was impossible to refer the symptoms to their true cause. The main phenomena were, deep jaundice, followed by great ascites; the disappearance of both the jaundice and the ascites after the third tapping; the reappearance of jaundice and ascites after an interval of about five months.

The first link in the chain of morbid processes resulting in jaundice and ascites was evidently the constriction, amounting to almost complete obliteration, of the common bile-duct. The exciting cause of the inflammatory process which resulted in this stricture of the gall-duct is not apparent. There was no indication of syphilis. There was no history of gall-stones, the passage of which might have caused ulceration and subsequent stricture of the duct. But, starting from the obstruction of the duct, the resulting phenomena are sufficiently intelligible. The impeded escape of bile caused the jaundice and the gradual dilatation of the hepatic ducts. The dilated ducts compressed the portal veins within the canals, thus obstructing the whole portal circulation, and causing the ascites. The jaundice was a direct mechanical result of the constricted gall-duct; the ascites an indirect result. The temporary passing away of the jaundice and ascites after the third tapping is explained by supposing that, in addition to a permanent constriction of the duct by inflammatory exudation, there was a congested and swollen condition of the lining membrane, which, after removal of the dropsical pressure by tapping, subsided, thus allowing the accumulated bile to escape, and removing the pressure from the portal veins. In like manner, we have seen that, in cases of simple stricture of the sigmoid flexure of the colon, temporary obstruction of the bowel may result from congestion and swelling of the mucous membrane at the constricted part. The swelling of the mucous membrane subsiding under the sedative influence of opium, the fæces again pass, and the bowel unloads itself. Then, after an interval of weeks or months, from the irritation of indigestible food or a drastic purgative, congestion and swelling of the mucous membrane with complete obstruction of the bowel again occur, with perhaps a fatal result.

The liver, unfortunately, was not weighed; but there was evidently a combination of enlargement, resulting from dilatation of the hepatic ducts, with some degree of atrophy of the glandular tissue; and some sections which my friend and colleague Dr. Barrow was good enough to make for me showed atrophy of the lobules, with an increase of connective tissue in the interlobular spaces. These atrophic and hyperplastic changes are exactly analogous to those which occur in the kidney in consequence of an impeded escape of urine from the gland, whether resulting from obstruction in the urethra, in the neck of the bladder, or in the ureter.

It is interesting to note that, although the last tapping, when her strength had been much impaired, was followed by fatal peritonitis, the previous three tappings not only afforded great immediate relief, but unquestionably prolonged her life in comfort for several months. This satisfactory result is an encouragement to repeat the operation of paracentesis in cases of recurring ascites, when other means have failed to remove the dropsy.

CASE OF INTRA-UTERINE SMALL-POX, WITH COMPLICATED PRESENTATION.

THE two cases of intra-uterine small-pox, published in the JOURNAL of the 10th inst., remind me of a case which occurred in my practice, during the small-pox epidemic of 1873-74, in which the presentation was also abnormal. The following is a short history of the case. I was asked to attend Mrs. P. in her tenth confinement; and at the full time, when I arrived, the uterus was fully dilated, but the presentation rather puzzled me at first. I found the head presenting, and, on the one side, considerably in front of the head, a hand could be made out; while on the opposite side, and immediately behind, I could, with some difficulty, make out a foot. The fluvius also presented, which, on account of the breadth of the pelvis, I found to be still pulsating. By pressing back the arm and head, I readily got at the foot, and, with comparative ease, turned and delivered.

The sequel is the point to which I particularly wish to draw attention. I observed, immediately after birth, a rash covering the body and face of the child. This eruption quickly developed into confluent small-pox, of which the child died on the sixth day.

The mother made a good recovery. One of the family was at the time recovering from small-pox, and had been through her illness nursed by the mother.—I am, etc.,

JOHN B. MACLEOD, M.D.

Windsor, July 19th.

THE TREATMENT OF ASTHMA.

By J. B. BERKART, M.D.,

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IV.

WITH the relief of the paroxysm, however rapid and successful it may be, the task is only partially performed. There remains the peculiar disposition—the asthmatic tendency—in virtue of which an exciting cause, even the most trifling in appearance, is at any time capable of producing a fresh attack of dyspnoea. To confine the treatment to the suppression of this symptom, each time it returns, may be satisfactory to the patient who, disheartened by the failures of many systems and of many remedies, has at last resigned himself to his affliction, and desires, when seeking advice, no more than some means wherewith to mitigate and to abbreviate his periodical sufferings. But that is a practice which, for obvious reasons, does not commend itself; and it is one, moreover, which, I venture to assert, is neither requisite nor justified. Nothing, so far as the pathology and the pathogeny of asthma are concerned, is in any way opposed to the adoption of the more rational course, viz., the prevention of the paroxysm. The characteristic feature of the disease—the intermission of the dyspnoea—shows that the predisposition, whatever it may be, is compatible with complete freedom of respiration; and all that, in the circumstances, appears to be needful is, on the one hand, to detect and avoid the causes of the occasional disturbances; and, on the other, to reduce the susceptibility to their influence.

Under the guidance of the prevailing theory of the disease, such rational treatment has been, and must always be, impossible. On this point, there can be no doubt. The experience of those who have most faithfully applied it is conclusive in that respect. But such painful demonstration is scarcely necessary to prove what is obvious at a glance. The mysterious derangements of the nervous system, alleged to form the predisposition to asthma, cannot possibly be the object of deliberate therapeutic measures; at any rate, all attempts to suppress, by smoking stramonium or by the internal administration of the drug, what is fancied to be the exaggerated contractility of the bronchial muscles, have hitherto had not the slightest effect. So also as regards the supposed causes of asthma: amongst them, there are such as cannot well be avoided, because they elude detection; while others that are recognised, as mental emotion, inscrutable differences of air and of places, etc., are so subtle and so insidious in their approach, that they cannot be guarded against; and there remains this remarkable peculiarity, that what at one time provokes asthma, cures it at another. The results of the treatment hitherto obtained fully correspond to the basis on which it is founded. But, in reality, that theory is a myth; transmitted from generation to generation, it has repeatedly found warm advocates in those to whom, themselves sufferers from the disease, it afforded much consolation. The semblance of scientific support which they brought to it has procured its ready acceptance on the part of practitioners, while the patients cling to it for the pleasing idea that their affection is purely nervous. The consequences of that theory have been the most mischievous; and not the least amongst them is that it is necessary first to combat the prejudices of the patients, before it is possible to adopt rational measures for their benefit.

Reliable indication for treatment can be obtained only by the sober consideration of facts. The present state of the patient, his previous history, and the nature and origin of the supposed complications, which invariably appear in the course of time, indicate the nature of the predisposition to the disease; while a knowledge of the provocatives of the dyspnoea, which in every individual differ with almost each paroxysm, can be obtained only by observing the habits of the patient, his exposure to certain injurious influences, subtle, but therefore not the less substantial and demonstrable.

In following the plan here briefly delineated, we are enabled to take timely measures for preventing even the development of the asthmatic tendency. It is a matter beyond question that with few, if any, exceptions, asthma always proceeds from inflammatory changes of the lungs. In the vast majority of instances, it arises in childhood as the direct continuation of catarrhal pneumonia, complicating whooping-cough, measles, and typhoid fever. In the comparatively rare cases, in which the dyspnoeal seizures appear, for the first time, at a more advanced period of life, they are invariably the sequel of a bronchitis, which, by the severity of its symptoms, and by its protracted course, shows that the adjoining lobules have been implicated in the process. I need not here enter into a description of the well known histological changes which

distinguish catarrhal pneumonia; for the present purpose, it is enough to recall the fact of their existence. Recovery being incomplete, inasmuch as the pneumonia is followed by paroxysms of dyspnoea, therefore, the inference is not unfounded, that permanent injury had been inflicted upon the lungs. The physical signs may be ambiguous, but their negative condition is no cogent proof that the injury is absent. Another serious consequence is that, after severe forms of the pneumonia, deformities of the spine and of the thorax invariably manifest themselves both in children and in adults. Doubtless, pre-existent rickets favour, in children, the origin of the pulmonary inflammation; but it is not the less certain that this may be, at all periods of life, the starting-point of changes in the capacity and in the shape of the chest. I have every reason to believe that, besides the mechanical element—collapse of the lungs and atmospheric pressure—nutritive disturbances in the bones themselves contribute towards them. The effect of these deformities upon the lungs of the growing child and of the grown up man will be readily understood. Hence it is of the utmost importance to prevent, especially in children and in feeble adults, the extension of the inflammation from the bronchi to the parenchyma of the lungs.

Now, catarrhal pneumonia occurs with the greatest frequency in crowded hospitals and ill-ventilated rooms, and at present the prevailing opinion is that it is mainly due to the weakness of the patient and to the aspiration of irritating matters from the larger into the smaller air-tubes. If that be so, I know of nothing more apt to produce pneumonia than the treatment adopted on the appearance of an inflammatory process in the air-passages. The patient is kept in bed, wrapped up in flannel, and, if possible, in cotton-wool, notwithstanding the high fever, by which he consumes himself. Doors and windows are tightly closed; every crevice capable of admitting air is stopped; the bronchitis kettle freely plies; and when the nervous system rebels against such ill-usage, then the cough is suppressed by narcotics or by chloroform, as in the whooping-cough of children. If the inflammation were to occupy a limb instead of a bronchus, I have no doubt that the most scrupulous antiseptic dressing would be applied; but because, as in the present case, the affected organ is hidden from sight, all and every precaution is neglected. It is unnecessary for the present to decide whether a particular fungus or any other irritant be the exciting cause of whooping-cough or of bronchitis; whatever it be, we have to deal with inflammation accompanied by exudation—a process in every way the same, whether it occurs on the surface of the bronchus or on that of the hand. The experience of modern surgery has abundantly shown the beneficial effect of pure air upon wounds, and the baneful consequences to them of a vitiated atmosphere. The open sore that festers and spreads in an ill-ventilated room, rapidly heals if exposed to the open air, even without antiseptic dressing. The experience of physicians tends in the same direction; yet the adoption of the most obvious hygienic measures is frustrated by the inordinate fear of cold. "Catching cold" is supposed to be the deadliest enemy to guard against, and the special cause of diseases of the lungs. It is, I am aware, a dangerous thing to touch prejudices, but I would only ask whether there is a shadow of reliable evidence that abstraction of heat—unless it be prolonged exposure to a temperature below freezing-point—has ever produced inflammation of any organ. I have no doubt the fear of a fancied danger, and the anxiety to avoid it, are productive of much mischief, inflicting in many instances injuries that cripple patients for life. I can only urge that, if henceforth catarrhal pneumonia is to be prevented, the first principle of treatment should be *non nocere*.

When asthma has declared itself, there are always pathological changes at the root of it, differing in nature and extent, but invariably exerting the same influence upon the functional activity of the lungs. The most constant amongst them are deformities of the spine and of the thorax, also presenting an almost infinite variety. Some patients exhibit, not only by the shape of their chests, but also by that of the head and the limbs, unmistakable traces of rickets, from which they suffered in childhood; in some, the thorax is relatively too narrow for their stature; in others, tall adults, the whole bony framework has retained childlike proportions; in others, there are curvatures and twistings of the spine in all directions, or depressions and projections of the sternum and the costal cartilages. In the obese the deformities are often not visible until, in the progress of the disease, emaciation has set in; but in many cases it will be found that if from the radius of the thorax be deducted the thickness of the layer of fat, and if its vertical diameter be measured, their chests are, whether deformed or not, relatively too small for their stature. A similar variety of changes exists in the lungs; there may be general atrophy and dilatation of the bronchioles, and of the air-vesicles—emphysema; or induration of the parenchyma, which, although lobular at the commencement, has invaded almost entire lobes, occasionally extending even to the mediastinum; there may be peribronchitis, with dilated bronchi, splenisation at one

place, emphysema at another, etc.; while the healthy portions of the lungs are always more or less in a state of congestion. Necessarily, the entire organism becomes involved in those changes. The right side of the heart is the first to suffer, and in due course there is marked stasis in all the systemic veins, affecting not only the skin and all the mucous membranes, but, occasionally to a marked extent, the thyroid gland and the kidneys.

It is the presence of these changes that constitutes the "relative insufficiency", as it were, of the lungs, and produces the increased susceptibility to exciting causes. It is to them that treatment is above all to be directed; and though they themselves are irremediable, yet much may be done to resist their progress, and to counteract their influence upon the healthy portions of the organ.

ON SCARIFICATION AS A NEW REMEDY IN SKIN-DISEASE.

By MALCOLM MORRIS, F.R.C.S. Ed.,

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In few departments of medical science is the advantage of the modern system of specialisation more apparent than in the study of diseases of the skin. Under the old system, this large and important class fell entirely into the domain of the physician, and in consequence lotions and local remedies were alone applied, and on their failure cases were abandoned as incurable; but now that dermatology is being regarded as a specialty, surgical methods have also been used, one of which I am about to discuss.

My attention was first drawn, early in 1878, to a pamphlet by Mr. Balmanno Squire, published in 1876, on *Port-wine Mark, and its Obliteration without Scar*, advocating scarification as a new remedy. My sympathy was excited by his account of the universal failure of all the remedies hitherto applied to remove this prevalent deformity, and the confidence with which he recommended his method determined me to try it. His new plan was, shortly, to freeze by means of ether-spray the part in question, to scratch it in parallel lines with an ordinary cataract needle, and then to press a piece of blotting-paper firmly on it for five minutes. This operation was to be succeeded at intervals by series of oblique or transverse scratches, and, within a fortnight, the port-wine mark was, to quote Mr. Squire, "to vanish, as if charmed away by incantation, and the patient cured absolutely and certainly for the rest of his life." The seeming simplicity and promised efficiency of this method of treatment made me quite enthusiastic, and I determined to follow it out exactly; but my enthusiasm soon diminished when I discovered that the operation was not so easy to practise as it seemed to be from the description. To begin with, I found that, though on paper the reasons given by Mr. Squire for the use of ether-spray, namely, the absence of pain and bleeding, seemed incontrovertible, considerable difficulties arose out of its use, for the hardness induced by freezing made it impossible to scratch parallel lines at an eighth or one-sixteenth of an inch from each other. To check this difficulty, I had made for me a multiple scarificator, the numerous blades of which were fixed at the stipulated parallel interval; but, nevertheless, the extreme hardness of the skin, and the ice itself produced by the ether-spray, clogged the instrument, and made it practically useless, so that, after repeated failure, I continued to perform the operation without previously freezing the part.

It will, I think, be well here to describe three of the cases kindly sent to me by Mr. Jonathan Hutchinson for the express purpose of trying this new method.

CASE I.—Miss P., aged 28, was sent to me in the beginning of 1878 by Mr. Hutchinson, with her right forehead, cheek, neck, arm, and hand affected, and also with a large patch on the left cheek, which Mr. Hutchinson had repeatedly cauterised. It was a typical case of superficial capillary nævus, or port-wine mark. In no part was it raised above the level of the surrounding skin. I commenced by treating a patch of two inches by three on the right forehead, and one beneath the right eye, with every detail prescribed by Mr. Squire in his pamphlet, making the scratches every few days, and in different directions. I soon found the inconvenience of freezing, of which I have just spoken; and about the tenth time began operating without previously freezing the place, and with the new multiple scarificator, with great advantage. After the operation, the blood was soon stanchied by means of firm pressure with blotting-paper, and in two or three days there was no sign left of what had been done, while the patient suffered only from slight soreness of the affected part. The pain at the time of the operation was severe, but only lasted for a few moments after the bleeding ceased. I continued operating for upwards of a year, and used the method one hundred and thirty times, eighty times on the patch on the forehead,