

forated on both surfaces of the tibia, and that on the external condyle of the femur was entirely destroyed and a caseous mass exposed. The peripheral portion of the patellar cartilage was undermined and necrosed. The whole of the diseased synovial tissue was removed, the crucial ligaments carefully cleaned, and the caseous centres in both tibia and femur thoroughly scooped out, so much so that the external condyle was a mere shell. In this case the tourniquet was not slackened, but pressure and elevation were relied upon to prevent hæmorrhage, the tourniquet only being removed on the completion of the dressing, with the limb fixed as before. Drainage-tubes and dressings as in Case 1. The first dressing was removed fourteen days after the operation, when the tubes and sutures were removed. The greater part of the superficial wound had united. The second dressing was on the forty-fifth day after the operation, and the wound was completely healed. The temperature never at any time exceeded 100° F. The boy left the hospital early in February, 1890. His general condition has wonderfully improved, and he is very active on the foot. The knee is slightly flexed, quite stiff and firm, and the leg slightly rotated out. I am greatly indebted to my nephew, Mr. C. B. Turner of University College Hospital, who assisted me with the operations and with the notes of these cases.

Grimsby.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

CASE OF LEAD COLIC.

By M. M. BOWLAN, M.B.,

ASSISTANT MEDICAL OFFICER TO THE UNION HOSPITAL AND WORKHOUSE, NEWCASTLE-ON-TYNE.

IN this case there existed no gum line, and this absence was due, doubtless, to the use of the tooth-brush and a table salt dentifrice. I append a note on the cause of the "blue line."

Mary T—, aged twenty-eight, white-lead worker, was admitted on October 6th, 1890, under the care of Mr. T. A. Dodd, the visiting surgeon, to whom I am indebted for permission to publish these brief notes. On admission she was suffering from a slight attack of lead colic and constipation, which, after three or four days, became very severe. There was no gingival discolouration, neither "line" nor "dots." No wrist drop or other paralytic symptom; her eyesight was good. No headache or fits. Urine free from albumen. She has worked at lead works for one year, with the exception of being absent "an odd week now and again." This is her second attack of colic, the first seizure having been six months ago, and was not so severe as the present. She worked chiefly at the "white beds"—i.e., carrying white lead to the rollers to be ground. She has never lost power in her hands, &c. While I was searching for the gum line she spontaneously explained that its absence might be due to her using a tooth-brush and thus cleansing her mouth and teeth daily with table-salt after returning from work. This habit she had practised some time previously when engaged in a dusty occupation (at a papermill: dirty dusty rags), as she had been told it would preserve her teeth. She says she had no intention of misleading the surgeon at the lead works. She was discharged quite well on Oct. 20th, 1890, the colic having yielded to an opium and sulphate of magnesium mixture. I was not aware until to-day (Feb. 23rd, 1891) that allusion is made to similar cases in Fagge's Treatise on Medicine. But as our case appears to be unique in having such a very definite cause, perhaps it may be none the less worthy of brief record. The gum sign is admitted to be generally present in chronic plumbism, and also in white-lead workers who have been exposed for any length of time, even though no toxic symptoms have developed. This case has some bearing on the proximate cause of the "blue line;" for if local cleanliness prevent its formation, it must be either by removing or neutralising some factor or factors essential to its production. Now, the generally received opinion appears to be that the lead is excreted by the vessels of the papillæ of the gums (and I presume as a

complex albuminate), and that it is here precipitated as a sulphide by the H_2S evolved in the decomposition of animal matters contained in the pores of the tartar on the teeth. And it is reasonable that local cleanliness should, by preventing the accumulation of tartar and the stagnation of the secretions and food detritus, hinder the formation of sulphides in the mouth. There can be no doubt that the saliva itself contains sufficient sulphur-charged proteid matter to generate, by decomposition, the required sulphide. But there is one other possible source, I think, of this sulphur without having to draw upon the disintegration of albuminoid bodies—viz.: that we have always present in the mouth as a constituent of healthy saliva a compound sulphide—potassium sulpho-cyanide; and some 130 milligrammes of this are secreted daily.¹ This salt "in aqueous solution decomposes with the evolution of ammonia at ordinary temperatures."² Watts makes no mention as to what becomes of the sulphur when a watery solution of KCNS thus breaks up, but it seems to me not improbable that it is a contributor, if not the actual source, of the sulphide which precipitates the lead in the gum. Doubtless microbes take part in this process of chemical change. From this standpoint the cleansing of the mouth prevents any discolouration of the gums by preventing the formation of that nidus for stagnant and decomposing animal matters and sulpho cyanides—the tartar of neglected teeth. And these matters gain access to the tartar in two ways: (1) By being carried down with the lime salts when the tartar is being deposited on the teeth; (2) by absorption into the pores of the tartar subsequently.

Newcastle-on-Tyne.

THE EXTRACTION OF BROKEN NEEDLES.

By CHARLES STEELE, M.D., F.R.C.S.

ALL who have had much to do with this minor operation know how frequently a satisfactory result fails to be obtained unless the indications for a safe operative procedure are strictly observed. It is most unpleasant, after cutting and probing with the finger and forceps, to be obliged to tell a patient who has endured some pain and much discomfort that further attempts are useless, and that the fragment is still there; and perhaps suggest as the best consolation that the needle has a more free opening by which to work its way out. I have for many years declined to cut unless I could make out the situation of a point, and that the other end had a firm bearing to rest upon; giving the assurance that patience and watching are the proper treatment for the time being.

Lately I have adopted a very simple, painless, and reliable plan, and have regretted that I had not thought of it in many previous instances. Last autumn, when I was visiting a child, a young lady, his sister, came into the room using her right foot naturally, but resting only on the toes of her left foot, and explained that she had gone about in this way for fully three weeks, as she had broken a needle into her left heel, and the slightest touch gave her great pain. The point of entrance was visible in the middle line in front of the tuberosities of the os calcis; the end of the fragment could be recognised through the skin, but the slightest pressure made it recede. I declined to operate, but directed that two thick felt corn plasters, one on the other, should be applied, with the puncture occupying the central hole, and that she should walk freely and bear well upon the heel. This she did with perfect ease, and after ten days the needle presented, and was withdrawn readily. It was the eyed end, and almost an inch long. Soon after this I saw a little girl, aged three years, who when away from home in the summer had also trodden upon a needle, which broke and entered between the ends of the metatarsal and tarsal bones. A surgeon saw her promptly, cut down, and tried for some time to extract, but failed. She often felt no inconvenience, but at intervals limped suddenly, and complained of pain. She was persuaded to wear a corn plaster, and after three weeks the portion of needle, which had been in more than three months, after producing a little superficial irritation, showed itself, and her nurse drew it out. The wrist and ball of the thumb are not unfrequently punctured, and if the fragment enters obliquely, or lies close to arteries or nerves, and cannot be forced into prominence, attempts at extraction are, to say

¹ Landois and Stirling.

² Watts' Dictionary of Chemistry.

the least, undesirable; whereas by adopting this simple method, after the manner of removing a thorn with the pipe of a key, and producing pressure with an elastic wristlet or slight steel spring like a small truss, the fragment will work out, and not give pain from any knocks while under the skin. In that awkward position, the soft parts by the sides of the ligamentum patellæ, this plan can be used. It recommends itself to everyone's common sense, and has the great advantage of not leaving any cicatrix.

Clifton.

A FAMILY OF DWARFS.

By G. OSCAR JACOBSEN, M.R.C.S., L.R.C.P.

THE following case of a dwarfish family has come under my notice:—

The dwarfs are three children, two girls and one boy, the father being a well-developed man, height 5 ft. 4 in., the mother (his first wife, now dead) having been about 4 ft. 10 in. The ages and heights of the children are as follows:—Chas. T. W—, a boy of fourteen years and a half, height 47 in. He is a very sharp lad, passed a year back the sixth standard of the School Board, but is generally small. Except for his mental powers he is in every way backward in development, there being no sign of hair about the pubes or axillæ, and his ideas are all rather childish. Nellie W—, eleven years old, height 36½ in. The child is fairly sharp, but very puny and delicate, having to be kept away from school during the winter months. Bertha W—, age thirteen years, height 44½ in. This girl is sharp and has passed the fourth standard, but has no signs of puberty and has never menstruated. I may say that both the girls are knock-kneed, but to no such extent as to make any great difference in height. The boy, the father tells me, when younger, "had something wrong with his ankles," which necessitated his being three years in a hospital. In contrast to these dwarfed children, I give the heights of the children of the same father by a second wife, who is about the same height as his first wife was. Eva W—, four years old, height 40 in., or 3¾ in. taller than the child of eleven years by the first wife. Lucy W—, eight years old, 44½ in. in height, being as tall as the child of thirteen years by the first wife. These last two children are also growing yearly, whereas the two dwarf girls have not grown for the last two years. Ann S—, daughter of the second wife by a first husband, is six months younger than the boy dwarf, but is fifteen inches taller, being 5 ft. 2 in. in height. She, moreover, has development of mammæ, has hair under the axillæ and on the pubes, and has menstruated for the last three months. The height is not alone wherein the children suffer, but their limbs are all small and in proportion to their miniature size, their heads being rather large. There is no other instance of dwarfs in either the father's or mother's families previous to this, and the mother is said to have always been a healthy woman. The mother was between twenty-four and twenty-five when she married, and had three brothers and three sisters, all of whom married and had healthy children, except one sister. All of the mother's children were born at full term, and no comment was made upon their size.

Huntingdon.

CASE OF CONGENITAL PHIMOSIS, LEADING TO DEATH AT THE AGE OF EIGHTY-THREE.

By ARTHUR S. TAYLOR, M.B. CANTAB., F.R.C.S.

JOHN F—, aged eighty-three, was found dead in a field in which he had been working. I made a post-mortem examination on the coroner's order, and found the following interesting condition:—

Lungs slightly congested with a little old pleurisy on each side. Heart large but healthy. The first part of the aortic arch was dilated, but for a man of eighty-three the artery wall was exceptionally good. Both kidneys were remarkably cystic, with enormously distended pelvis and ureters. The bladder was greatly distended by urine, and in two or three places only the peritoneum prevented rupture into the abdominal cavity. There was no stricture of the urethra, though the middle lobe of the prostate was much hypertrophied. There was congenital phimosis, the circumference

of the aperture when slit open and stretched being one inch. On opening the skull, I discovered submeningeal hæmorrhage covering the base of the brain, running down the vertebral canal, and spreading over both frontal areas. I could discover no small aneurysm, nor the actual vessel which had given way. The interest of the case lies in the slow but sure progress of the disease. Doubtless, the end was hastened by the hypertrophy of the middle lobe of the prostate. At the inquest, the deceased was said to have enjoyed very good health. He had had an attack of dropsy a year previously, and shortly before his fatal apoplexy suffered from epistaxis. The arteries at the base of the brain were rather rigid, but by no means bad. He had had several children.

Surbiton Hill.

A Mirror

OF

HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium

ST. THOMAS'S HOSPITAL.

TWO CASES OF DISLOCATION OF THE ULNAR NERVE.

THE condition of nerve described in the account of these two cases is one which has not hitherto been recognised in the literature of this country. No mention is made of it in our works on surgery, even when they treat of the subject of nerve injury in a special manner. The only contribution on the subject we can find is one by Dr. F. J. Lutz,¹ who wrote of a case of habitual dislocation of the left ulnar nerve. This account will be read with much interest, more especially the parts which describe the operative measures which were successfully undertaken to secure the nerves in their normal position. For the notes of the cases we are indebted to Mr. E. C. Stabb, surgical registrar.

CASE 1. — E. N—, aged twenty-eight, married, was admitted under the care of Mr. Croft on March 7th, and left the hospital on April 9th, 1891. Six weeks ago the patient fell, grazing her right elbow against the edge of a bucket. This injury was followed by cellulitis, limited to the region of the elbow, and she was admitted to St. Thomas's Hospital twelve days after the injury, and an abscess opened just above the internal condyle of the humerus. She left the hospital well at the end of a week. A few days after this, on commencing to work again, she felt pain on the inner side of the same elbow, shooting down to the hand, whenever she flexed the forearm. On March 7th she was readmitted, and on examination it was found that on slowly flexing the forearm, when this movement reached to about a right angle, what appeared to be the ulnar nerve slipped forwards over the internal condyle, taking up a position in front of it, and causing pain to the patient. On extending the forearm again the nerve resumed its anatomical position. There was no local tenderness or loss of sensation, or wasting of muscles, but the grasp of the right hand was distinctly more feeble than that of the left. On the 16th Mr. Croft exposed the nerve by a semi-lunar incision. It was slightly thickened, and freely movable over the internal condyle. He then stitched the sheath of the nerve to the inner margin of the triceps tendon, and finally attached the edge of the same to the periosteum covering the internal condyle, leaving the nerve completely embedded. The arm was fixed in plaster-of-Paris splints in the extended position. The day after the operation the patient complained of sensation of pins and needles in the fourth and fifth fingers. Sensation was almost absent from the fifth finger. The wound healed by first intention, and sensation gradually returned.

On discharge from the hospital the nerve was quite fixed in its normal position. There was no pain on flexion of the

¹ St. Louis Medical and Surgical Journal, 1879-80, vol. xxxviii., p. 550.