cases raises a barrier which requires all the energy and skill of enlightened sanitarians to surmount.

As a result of a perusal of Mr Crimp's volume, the reader will be convinced of one rather discouraging fact, viz., that notwithstanding all the attention which has been devoted to the disposal of sewage during the last twenty years, we are still far from a solution of the all-important question of how the sewage of a large city, such as London or Glasgow, can be satisfactorily dealt with at a reasonable cost. But if this be somewhat depressing, yet one cannot help admiring the way in which science is striving to attain success, nor can one doubt that ultimately—it may be in the near future—its efforts will meet with the desired success.

The author gives the results of the various methods of sewage disposal employed in different towns, and the information afforded will be found of the greatest use to all interested in the question. Some omissions we have noticed; and certainly the index might, with advantage, be made fuller. We find no mention of the Berlin Sewage Disposal Works, which surely, both on account of their magnitude and what they have effected on the health of the inhabitants, were deserving of an extended notice. We would, however, at present rather overlook any deficiencies the book may have, and extend to it a hearty welcome as a most valuable addition to the standard works on the subject.

The Journal of Anatomy and Physiology, Normal and Pathological. Part IV. of Vol. XXIV. London: Williams & Norgate: 1890.

This number of the above journal contains several papers of considerable clinical and pathological interest. Thus Dr Henry Alexis Thomson has an important paper on "Acromegaly, with the Description of a Skeleton;" Dr William Aldren Turner writes on "The Pathology of Retro-bulbar Neuritis;" while Dr Walter K. Sibley discusses "The Nature of the Giant-cells of Tubercle," and Professor Humphrey "The Pathology of Genu Valgum." Dr Joseph Tillie continues his account of the "Pharmacology of Curare and its Alkaloids," and Dr James Cagney describes the "Disposition of the Vertebral Column in Hanging and Swinging Postures." There are also several articles dealing with questions of more purely anatomical interest, such as Dr E. W. Carlier's "On the Fate of the Notochord in the Sheep," and Prof. Dwight's "On the Sternum as an Index of Sex, Height, and Age."

The paper on Acromegaly by Dr. Thomson records the alterations in the skeleton from a characteristic case of this rare disease. So far only two similar skeletons have been described,—viz., by A. Broca in Paris and Virchow in Berlin. The skeleton described by Dr Thomson is that of a male subject, aged 36, who was admitted to Dr Claud Muirhead's wards in the Edinburgh Royal Infirmary
in 1878 on account of diabetes mellitus. While in hospital it was noticed that his hands and feet were very greatly enlarged, that his face was elongated, with the brows overhanging and the lower jaw protruding. These symptoms occurring in association are now regarded as characteristic of acromegaly.

After death the pituitary body was found hypertrophied, equalling a walnut in size; the abdominal viscera, more especially the stomach and intestines, were also the seat of a very considerable hypertrophy. In the macerated skeleton many interesting changes were observed, from which the existence of acromegaly during life could be inferred with considerable certainty. The most striking alterations in this specimen were to be found in the bones of the head, those in the extremities being slight in comparison with those described by Virchow.

In the skull there is a disproportionate increase in the dimensions of the face; the latter is elongated rather than broadened, and the elongation is mainly due to an increase in the vertical diameter of the superior and inferior maxillae. In profile view the facial angle is diminished by the very considerable anterior projection of the chin. The superciliary ridges are large and prominent, project in front of the glabella, and by overhanging the orbital cavities impart a frowning and forbidding aspect to the skull as a whole. The prominence of these ridges was found to be partly due to the dilatation of the frontal sinuses.

The anterior projection of the lower jaw, observed during life in this and in other cases of acromegaly, depended not only on the hypertrophy of the jaw itself, but also upon changes in the temporomaxillary joint on either side, which resemble very closely the changes met with in arthritis deformans. The glenoid cavity was greatly enlarged from wearing away of the eminentia articularis bounding it anteriorly, thus permitting the condyle to slide forwards to an abnormal extent.

In the interior of the skull the pituitary fossa was very greatly enlarged, a result of the pressure of the body which occupied the fossa during life.

The cranium itself, as revealed by a series of comparative measurements, considerably exceeded the average in length, breadth, height, and cubic capacity.

The bones forming the cranial box were noticeably increased in thickness, there being no departure, however, from the normal structure such as that met with in osteitis deformans.

The bones of the trunk and limbs were abnormally large; more especially was this the case in the clavicles, ribs, pelvic bones, metacarpals, and phalanges. In appearance the bones were heavy and clumsy, the surface compact layer being rough and spongy, with an infinite number of grooves and apertures for bloodvessels. The ridges and processes for muscular attachment were very prominent. The costal cartilages were ossified.
Changes resembling very closely those met with in cases of arthritis deformans were observed in the vertebral column, in the shoulder and hip joints, and in the right elbow.

Professor Humphrey states that he has taught for many years that the essential feature of genu valgum is a deficiency in growth at the outer part of the lower epiphysial line of the femur. He shows that if a thigh bone be placed with its lower articular surface upon a table or any horizontal plane, a plumb-line will fall from the head of the bone obliquely through the shaft to the outer condyle. This and various other circumstances throw a difficulty upon the growing force in the outer part of the epiphysial line which in some young persons it is not quite equal to meet. From the examination of many specimens, he has seldom had reason to think that there had been any undue amount of growth of the inner condyle or the part above it.

---

**Part Third.**

---

**MEETINGS OF SOCIETIES.**

**MEDICO-CHIRURGICAL SOCIETY OF EDINBURGH**

**SESSION LXIX.—MEETING XI.**

*Wednesday, 4th June 1890.—Prof. A. R. Simpson, President, in the Chair.*

I. **EXHIBITION OF PATIENTS.**

1. *Mr George A. Berry* showed a man, J. B., aged 21, from whose left orbit he removed the end of the stem of a clay pipe, 1 3/4 inch in length by 1/4 inch in thickness. The patient when first seen had considerable protrusion of the eye with oedema of the lids and conjunctiva. The portion of pipe lay about 1 inch from the surface, and although it had been in the orbit for ten days had not produced suppuration. The eye was uninjured.

2. *Mr A. G. Miller* showed a successful case of laparotomy for tubercular peritonitis in a girl, aged 10, a description of which appeared at page 341 of this Journal.

II. **EXHIBITION OF SPECIMENS.**

1. *Dr James Ritchie* exhibited kidneys from a female, age 48, of rheumatic constitution. She had borne ten children, for some years had been anaemic, not robust, and was liable to sudden acute attacks of pain in left lumbar region, accompanied by great pros-