REMARKS. It is rare to meet with cases of epistaxis in which astringents and styptics do not very speedily arrest even severe hæmorrhage. In the present instance, there was no evidence of the patient possessing the unfortunate tendency to hæmorrhage from every part of the body, which is known by the term hæmophilia; nor did it appear either from the constitution of the blood that there was any disorganising process at work, which by reducing or breaking up the red corpuscles, and increasing the fluidity, enabled the blood to transude more readily at the mucous membranes or elsewhere. In the case of an elderly lady, who was subsequently under my care for a similar very troublesome affection, the irritation produced by the strange habit of taking large quantities of snuff appeared to account for a persistent epistaxis, which, after some trouble, was permanently arrested by the local application of the tincture of the sesquichloride of iron. In the man whose case I have detailed, there was no source of local irritation; in fact, there appeared to be no cause to which the affection could be attributed, but the continued exposure to cold which induced internal congestion. From the numerous deaths from phthisis in his family, it may be inferred that his mucous membranes were delicate, and that this formed a predisposing cause; the epistaxis acting in a measure vicariously for that pulmonary hemorrhage which might otherwise have ushered in pulmonary consumption.

#### TAUNTON AND SOMERSET HOSPITAL.

OPERATION FOR THE RADICAL CURE OF PROLAPSUS UTERI.

By C. H. CORNISH, F.R.C.S., Senior Surgeon to the Hospital.

SARAH C., aged 48, widow, was admitted into the Hospital, on September 29th, 1860, under Dr. Kelly and Mr. Cornish, suffering from heart-affection and complete prolapse of the uterus, which had existed upwards of twenty years, rendering her life miserable. When she stood, the uterus protruded between her thighs. In addition to this, she was of a most irritable temperament. Near the os uteri was a small elongated tumour, which, shortly after her admission, was removed by ligature. The catamenia had not altogether ceased.

A week after her admission, she had a bronchitic attack, which postponed the operation for a time. In consequence of the heart-affection, it was deemed prudent not to administer chloroform.

November 25th. She was ordered to have slop diet; to take a dose of castor oil, and to have an enema early the following morning.

November 26th. The patient being secured on the table as for the operation for lithotomy, an incision was made parallel with the meatus, through the skin at the edge of the labium on each side, to the inferior commissure, and continued through the lateral walls of the vagina to the depth of about an inch and a half, and extending to the posterior wall of the vagina to a similar depth; thus removing a large flap of mucous membrane on each side, as well as from the perineal boundary of the vagina. No hæmorrhage of any consequence oc-curred. The denuded walls of the vagina were then brought into apposition by three quilled sutures; and four interrupted sutures were applied to the edges of the cut labia; silver wire being used for both. knees being tied together, she was removed to bed, and a catheter was introduced into the bladder. She was ordered to take a grain of opium every four hours, and two grains of opium at night.

The grain of opium three times a day was ordered to be continued on the following two days; and on the

three ounces of port wine; on the 30th, twenty minims of liquor opii sedativus were given at night.

December 3rd. All the sutures were removed.

December 4th. Her bowels not having been acted on since the operation, a large enema was administered with good effect. She was ordered to have a chop and egg daily, with half a pint of ale; and the following mixture:

B. Acidi nitro-muriatici mvij; infusi calumbæ 5xj; tincturæ aurantii 3i. M. Fiat haustus bis die

She continued progressing well, and was discharged on February 9th; the union being perfect, and extending close to the meatus. She was retained in the Hospital several weeks after cure that the case might be watched, and had daily walked about the ward without inconvenience.

## Original Communications.

#### STRUCTURE AND THEGROWTH OF TISSUES:

A SHORT ACCOUNT OF THE CONCLUSIONS DERIVED FROM SOME NEW OBSERVATIONS WITH THE HIGHEST MAGNIFYING POWERS.

#### By LIONEL S. BEALE, M.B., F.R.S.,

PROFESSOR OF PHYSIOLOGY AND OF GENERAL AND MORBID ANATOMY IN KING'S COLLEGE, LONDON; PHYSICIAN TO KING'S COLLEGE HOSPITAL; HONORARY FELLOW OF KING'S COLLEGE; ETC.

### II .- OF THE POWERS OF GERMINAL MATTER. [Continued from p. 139.]

Of the Powers of Germinal Matter. As far as I can learn, there are no peculiar characters in germinal matter which will enable us to form the slightest conception as to its properties or powers, or to tell from what class of living beings it has been derived. The germinal matter taken from one elementary part exactly resembles in microscopical characters that existing in another, although the whole history of the after-life of the two may be widely different.

A small collection of particles taken from the growing tissues of the mammalian embryo at an early period of development, resembles exactly, in every particular that I can discover, even in its behaviour with certain reagents, a collection of particles entering into the formation of one of the so-called cells of a fungus; yet how different are the powers of these two masses of soft granular matter !

The active material of the fungus goes on increasing, dividing, and subdividing, without further change in structure or power; while, on the other hand, the active material of the mammalian embryo increases by subdivision, but its powers are different in every stage, and the structures formed from it are different. It retains its property of infinite growth; but, as it subdivides, there is an alteration in the powers of the resulting masses. The mass at first possesses the power of giving rise to germs from which bones, muscles, nerves, and all the tissues spring; but the power of each resulting series is more limited, and at last the germs have power to produce only the particular tissue which it is their office to form, and we have germs which produce bones, cuticle, muscles, nerves, etc., but those which produce bone cannot develope muscle or fibrous tissue, neither can the cuticle-germ give rise to any tissue except cuticle; nay, 29th, she was ordered to have two grains at night, and germs may be removed to parts of the body at a distance

rom the points at which they have been developed, and they still give rise to the formation of their characteristic tissue. Bone may be made to grow in various parts of the body, and its germs have formed bone-tissue even in the lung. Yet all these germs have apparently the same origin; and we must, therefore, conclude that as successive generations of germs are formed in one individual organism of complex structure, the power of producing different kinds of tissue-forming germs becomes more limited, although each still retains its power of infinite multiplication if the restrictions, under which its growth is normally carried on, be removed.

As development proceeds and more perfect structures are evolved, the tissues first formed, having served a temporary purpose, are removed. In the formation of some of the tissues of the higher animals, several series of textures succeed each other in regular order. The germs of the whole series have arisen from the same mass, but the development of each successive order of germs has led to the production of structures which materially differ from one another in properties, mode of growth, and chemical composition. It might be said that the conditions necessary to the growth of the first series become changed, and the resulting textures are modified in consequence; and that every successive alteration of the conditions under which the germs grow necessarily produces a modification in the character of the changes taking place in them. It does not seem that the first series of germs dies, after having arrived at the end of the natural period of its existence, and gives place to the next set; but, before the first series have ceased to grow, they are encroached upon by the increase of those which are to take their place, and are thus destroyed; the vital powers of those last formed being greater than the vital powers of those which preceded them. The first set may by their growth be removed to a great distance from the nutrient material, while perhaps the development of tubes carrying nutrient matter accompanies the increase of the latter; and thus material capable of being animated is freely distributed to them. But these supposed altered conditions have not been brought about by the influence of accident, nor are they due to mere external agents; but they result, so to say, from the changes which have been effected by the particles which preceded those whose development we are considering; the conditions which favoured the growth of the last having been induced by a previous series, and so on from the beginning; internal conditions resulting from the action of a preceding race of living particles being at least as necessary to the development of a structure as the external conditions of heat, light, elec-

These external conditions appear to act very differently upon different living structures exposed to their influence under precisely the same circumstances. The different results seem to be due to the different internal powers of the living structures which they have derived from preexisting structures of the same kind. In no case does it appear that any essential modifications of structure or altered order of changes or action, have been induced and maintained by altered external conditions. The tendency of actions, due to inherent powers, to repeat themselves in the same order in endless series, seems to predominate over, and to resist, the tendency which altered external circumstances may be supposed to exert in modifying the structure of tissues and the nature of the physiological changes, which characterise every kind of living structure. The power of repetition -in fact, the life of the structure-is destroyed by the altered external conditions to which it is exposed before these have produced the modified results expected, or, if I may so say, caused the changes to diverge from the direction they were originally made to take.

[To be continued.]

# SCROFULOUS DISEASES OF THE EXTERNAL LYMPHATIC GLANDS:

#### THEIR NATURE, VARIETY, AND TREATMENT.

By P. C. Price, Esq., Surgeon to the Great Northe Hospital; the Metropolitan Infirmary for Scrofulous Children at Margate; etc.

### III.—Tuberculous Disease of the External Disease Of the External O

[Continued from page 144.]

II. Notwithstanding the most judicious and persevering resort to such therapeutical means as have be described, it very commonly occurs that tuberculous glands remain in a state of induration and enlargement for an indefinite period, and demand more direct surgical interference, on account of the disfigurement, inconvenience, and positive danger to important structures and functions, which they cause. But the adoption of such measures as will be presently discussed depends on certain conditions, which it is all important to be in mind; for an injudicious employment of them not only frequently leads to indifferent results, but to convergence the opposite to those which the surgeon desired.

No precise rules can, however, be laid down, by which to regulate the kind of local treatment to be followed although there are certain features in every case falling under notice, which, if duly appreciated, will enable the practitioner to select those means which are most appropriate. An acquaintance with the history and symptoms exhibited by slow, insidious, and obstinate tuberculous disease of the lymphatic glands, situated, for instance, in the neck, at once forbids a too speedy resort to details measures; for it commonly happens that although, are considerable period, only one or two glands in a particular region may evidence implication of a persistent character, others in closer or more distant relation will sooner or later assume similar morbid conditions.

This is particularly the case when the patient shows a marked tendency to tubercular disease of other organs.

Too great care cannot, therefore, be exercised in recommending a plan of treatment, which, even under apparently favourable circumstances, is not always followed with the wished for success.

When it is determined to destroy or remove one, two or a limited number of glands, one or other of the following methods may be employed; but they ought never to be practised before recourse has been had to milder means, and to those measures which are known to improve the general health.

Experience has so thoroughly convinced me of the importance of attending to this recommendation, that I rarely suggest even the consideration of any ultimate local treatment ere I have made certain that milder any more general means have, after a fair trial, proved unavailing.

a. Caustics and Actual Cauteries. The destruction obstinate tubercular glands by means of one or other of these agencies, is a practice which has met with admirers. but I much question not only its advantages but is An indurated gland, even admitting that propriety. tubercular infiltration has led to considerable alteration of the true glandular tissue, cannot be disintegrated and destroyed by means of caustics, without involving the integrity of neighbouring parts, and occasioning amount of inflammatory disturbance which may prome constitutionally injurious. It is also questionable who ther the ultimate results of this practice be so satisfa tory as some authorities assert. I have seen very serious inflammation ensue from even a most careful use of caustics, applied in the way to be first described