authors in saying that *pulmonary phthisis is both connective and epithelial*.

The coincidence of caseous products and granulations is so frequent that Niemeyer, obliged to recognize it, does not regard it as accidental, but is forced to admit a *causal* relation between the two. But, according to him, in the majority of cases, tubercles are developed tardily, and only complicate pulmonary phthisis at an advanced period. This has led him to the conclusion, somewhat unexpected, that pulmonary phthisis cannot, therefore, be considered as a tubercular phthisis properly so called, notwithstanding the presence of tubercles in the lung. Badoky partakes of this opinion, and also thinks that generally the caseous masses are primitive, and that they provoke the appearance of tubercles.

Niemeyer, however, furnishes us the argument whereby to combat himself. He could not fail to remark the singular distribution of tubercles which are most frequently found exclusively situated in the immediate neighborhood of caverns and caseous deposits. If the deductions, then, which we have just drawn have been followed with attention, it will be instantly seen that this fact alone is sufficient to clear up the whole question. In fact, the inflammatory miliary nodules not being distinguishable from true tuberculous granulations, these nodosities, when they have undergone fatty transformation, can no longer be distinguished from the caseous products resulting from a chronic pneumonic process, and it seems to me perfectly simple and rational to admit that the peripherec granulations are the latter, and nothing more.

The best proof, says M. Colin, that pulmonary phthisis, taken in the largest acceptance of the word given to it by Laennec, is of the same family as granular phthisis, is, that in cases where pulmonary phthisis becomes acute (galloping consumption), we always find about the caverns and tuberculous masses a crop of gray granulations identically like those of acute tuberculization.

Dr. Bidlot, of Liege, has described, in a recent work, under the name of *accidental* or *false phthisis*, a consumption, characterized, according to him, by inflammatory pseudo-tubercles. This kind of phthisis should be perfectly separated from *real* phthisis resulting from the evolution of true neoplastic tubercles.

But if, according to this author, pseudo-tubercles cannot be distinguished from true tubercles when they have both undergone

caseous transformation, it is only during the first period of phthisis that it is possible to recognize many species of it.

Besides, accidental phthisis, in consequence of the prolonged deterioration of the economy, occasions, most frequently according to M. Bidlot, the production of neoplastic tubercles, whilst the true tubercles of real phthisis induce inflammatory irruptions, the exudations from which are transformed into false tubercles.

When I shall have recalled that even before the period of softening, the distinction between the true granulation and the inflammatory miliary nodule (pseudo-tubercle) has been declared impossible by the ablest micrographists, it seems to me that I am authorized in not accepting the divisions adopted by the physician of Liege.

Consequently, if the anatomical demonstration of the preëxistence of tubercular granulation is not always possible, still no fact seems unfavorable to this opinion.

Finally, MM. Herard and Cornil think that the special pneumonia which accompanies the granulations plays the principal rôle in consumption, and it is necessary to attribute to it almost entirely the more or less rapid and more or less extended destruction of the pulmonary tissue.

This theory, very plausible, but which is for its authors themselves only a gratuitous supposition, should have the merit of conciliating opinions and conduct to the unity of the disease.

[To be concluded.]

ON CERTAIN NEW SURGICAL INSTRUMENTS AND APPLIANCES.

By FRANCIS H. BROWN, M.D., Boston.

As I feel it the duty of every practitioner to add whatever he can, however small, to the common property of the profession, I venture to describe some instruments which have come under my notice recently. Not that they are all strictly new—but they are, as far as I know, as yet unused in this neighborhood, though samples of some of them are in the possession of one or more of our New England men. They are all instruments of value, and to members of the profession, specialists or general practitioners, will prove useful in alleviating, in one way or another, some of the ills of humanity. The instruments have been brought to the notice of some of the instrument makers of this city, and a part of them have already been manufactured and are ready for use.

Tongue Depressor or Spatula.—It consists of a firm handle of hard rubber or ebony, having a hook at the lower end to give greater security of grip; from the top of the handle rises a rod which is bent at a right angle, and then—appropriately curved to avoid the teeth—is secured to a plate of proper form to be applied to the tongue. In some of the instruments adjustable blades are provided, in order to a more ready application on either side, or for the mouth of children or adults. This instrument is the one most commonly employed in Vienna, and possesses great advantages over the form in general use here. By the shape of the handle, it enables the operator to get a much more secure grip and to apply a greater force to the muscles of the tongue, which are sometimes so strong and unyielding. The peculiar bending of the rod allows it to escape the incisor and bicuspid teeth, and the adjustment of the beak gives a *flat* pressure on the tongue, in place of the insufficient pressure of the common instrument. Moreover, the position of the handle and the twist in the rod keep the instrument at the *side* of the mouth and entirely out of the way of the surgeon in any operation.

Porte Aiguille, for metallic sutures in staphyloraphy, vesico-vaginal fistula, etc. Many varieties of this instrument have been made, each one making some advance and presenting new excellencies. In the last one which has been used in this country, the wire is propelled through the instrument and canulated needle by means of a slide, roughened beneath, where it is in contact with the wire. In the instrument now made the slide is replaced by a small wheel, grooved and roughened on its circumference, by the use of which much more power is exerted on the wire and a much longer portion is thrown forward at each movement of the thumb. Needles of various shapes accompany the instrument.

The objection raised by a friend a few days ago that the wheel might fail to throw the wire through the needles bent at a right angle seems to me invalid. The wheel is made of hardened steel, and its "bite" on the soft wire is ample to throw it forward for an indefinite time. The needles bent at right angles *must* be used in certain operations, and no instrument which has been made can propel the wire more certainly than the one now noticed. In the case in question, I think the suture had been drawn too far back, and in its progress impinged on the end of the needle itself. It is entirely unnecessary that the wire should be drawn so far back—in fact, the extremity of the

suture should be placed in the canulated needle, before the latter is put into the instrument.

Atomizer for the Eustachian Tube.—When we have arrived at a point which enables us to diagnose between diseases of the ear proper, "nervous deafness," so called, and diseases affecting the tympanum, the ossicula or the membrane of the tympanum, it is time for us to reject the old and sole treatment by the syringe and a drop of glycerine, as well as the theory that all ear diseases will either get well of themselves or not get well at all, and devote ourselves to the refinement of treating the disease, wherever it may exist, locally and particularly; and it is for the purpose of treating that class of ear diseases which affects the Eustachian tube and the cavity of the tympanum that this instrument has been devised by Dr. Bishop, of London. Incredible though it may seem, there is no doubt that the vapor, appropriately medicated, as it may be, *does* reach the Eustachian tube and the tympanum itself, and the most desirable results are obtained. The apparatus consists of a common Eustachian catheter, a small glass syringe, and the usual bulb employed with atomizers. I quote Mr. Bishop's description: "The solution, contained in the syringe, is gently forced, guttatim, into a cylinder, and at the point where it leaves the syringe it is caught by a current of the air sent by a pump worked with a proper degree of force by the hand. This drives the fluid forward in a pulverized state. This small apparatus is then attached to an ordinary Eustachian catheter, previously introduced, and suspended by a suitable apparatus. To ensure complete pulverization, the end of the catheter is covered with a fine gauze wire. Some amount of dexterity is required in the successful use of this instrument, but this is soon accomplished by any one accustomed to the introduction of the catheter."

Dressing Basin.—Though an humble, this is certainly a very excellent and useful implement for surgeons, and especially for hospitals, for the dressing of wounds in all parts of the body. It consists of a basin an inch or two in depth, made of brass or tin, and kidney shaped, its edges bevelled, so as to be firmly applied to the surface of the body. It is especially useful for syringing the ear or applying lotions to that organ; but can also be used in all dressings, in opening abscesses, syringing out sinuses, &c., in every part of the body; its peculiar shape rendering it easily applicable to either

of the limbs, to the chest or abdomen, at will.

Recurrent Syringe.—In looking over the stock of Mathieu, I found what he called a recurrent syringe. It is simply a hard rubber syringe, holding hardly more than a drachm, to which is attached a small ivory tube, two and a half inches long. The tube terminates in an olive shaped bulb, just below which are three small holes. The design of the instrument is to apply it in gonorrhœa and other cases of urethritis, with the view of washing the contents of the canal *out* rather than *in*. The diminutive size of the syringe, however, the shortness of the tube and the smallness of the apertures, render the instrument almost worthless. Believing that a valuable principle was contained in the idea, I caused an instrument to be made, which I think may be successfully applied in the diseases mentioned above. It consists of a silver tube, five inches long and of the size of a medium catheter, having the same olive-pointed extremity, beneath which are two sufficient orifices. This is attached to a Davidson syringe, and—after the patient has passed his water, in order to remove any accumulated pus or mucus—is passed into the urethra. Water, warm or cold, and medicated fluids to any amount and for any length of time, can then be applied to the urethra, without removing the canula, and the irritation, consequent on the passage back and forth of an instrument holding so small an amount as that of Mathieu, is avoided.

Tissue Rubber Cots.—It constantly becomes necessary for us to use the hands where they come freely in contact with the natural or unnatural fluids of the body, and when the hands are injured in any way and any open wound exists, such contact becomes absolutely dangerous; at the same time, it is essential, especially in midwifery, to retain, unimpaired, the sense of touch. To this end the French fabricants will make to order a cot of tissue rubber, which applies itself tightly to the finger, and does not materially interfere with the sense of touch. Secondly, as personal experience has shown, if a poultice be needed, the cot, by retaining the heat and moisture of the finger, forms a very neat, handy and efficient substitute for that usually clumsy surgical appliance.

Lithexer. (Robert and Collin.) This is a very simple and most efficacious instrument, very recently devised by M. Collin, for removing the debris of a calculus after lithotomy. It consists of a silver catheter, pass-

ing, by its distal extremity, through the bottom of a four ounce vial. To the top of the bottle is applied a rubber bulb. To employ it, water is first passed by the catheter into the bladder; the bulb, being then compressed and adjusted to the bottle, is allowed to recover its natural size, and, in doing so, draws a portion of fluid from the bladder with fragments of the calculus. These fall into the bottle and are retained, while the fluid is forced back into the bladder by subsequent pressure on the bulb, again to serve its purpose of raising more fragments, which are in turn deposited in the bottle. The process is continued till the debris is entirely removed.

Hospital Reports.

BOSTON LUNATIC HOSPITAL.

C. A. WALKER, M.D., Superintendent. Reported by
T. W. FISHER, M.D.

Cases of General Paresis.

(Concluded from Vol. I., page 364.)

CASE VI.—Mr. L., 36 years, soldier, single, a steady drinker. A year ago, became very irritable and unreasonable, taking a strong dislike to his relatives. Has not been under their observation since. Has done little or no work, on account of feeble health and the loss of an arm in the war. Two or three days ago, felt a "weakness," while in the street, and called a hack to take him home. Fell on the door-step, and became unconscious. In the morning was delirious, insisting that there were thieves in the house.

On entrance, Nov. 2d, seemed tolerably rational, but not inclined to talk. Speech very tremulous, and hesitating badly at certain words. Walks feebly, and with a slouching gait unnatural to a soldier. Seems to be apprehensive of danger, and has hallucinations of sight and hearing. Acts like a man in delirium tremens at times, but is not altogether sleepless.

Nov. 7th.—Tolerably quiet till to-day, when he was found stripped to the waist, expecting a flogging. Fell, on being led to his room, and was seized with a violent trembling. Says he feels something like a "small bladder" in the palm of his hand and in the end of his stump.

Nov. 18th.—Apprehensions, hallucinations and trembling continue, more or less marked. Speech very broken, and strength failing. Is constantly uneasy and eats and sleeps very irregularly.