both in and out of the profession. Another class of cases of congestion is frequently seen, of an entirely different character, and occur under very different conditions. They are generally noticed in the latter stages of disease, in fever, inflammation, or in chronic affections; and whilst they may exhibit no startling signs of immediate danger, they are, doubtless, the final cause of more deaths than occur in the former class. As a rule, and by common consent, bleeding is totally inadmissible in these cases, unless done in the first stage of the disease, and the strength of the patient yet is unbroken.

It was not the purpose, nor is it within the scope of this paper to enter upon the subject of bloodletting in ordinary inflammation, and especially in pneumonia. The difference, or rather the antagonism, of opinion in regard to the treatment of this disease, and the conflicting statistical reports of success, based upon the use or neglect of the lancet, may not be regarded as complimentary to the profession. Inflammation and its attendant fever does not occur without a cause, a noxious agent; and hence, such inflammation and fever must be regarded, in tendency, at least, as conservative; and so long as inflammation does not become so violent as to threaten the integrity of tissue, and organs essential to life, there would appear to be no necessity for the abstraction of blood; whilst in cases of great intensity, unless reasons of special, imperative character forbid, blood should be taken at the earliest moment, and to such extent as the constitution and existing conditions will admit. The danger so often spoken of in opposition to bleeding sinks into insignificance compared with that resulting from intense, unrestrained inflammatory action. The ability of the constitution to bear great loss of blood is exemplified in the fearful condition to which women in abortion, or post-partum, are at times reduced, and from which they often recover with marvelous rapidity.

CATHETER BROKEN OFF IN PROSTATIC PORTION OF URETHRA--EXPEDITIOUS REMOVAL.

BY ARTHUR L. WORDEN, M.D., DES MOINES, IOWA.

I notice, in your issue for Sept. 15, the paper of Dr. Hard, in which he recommends a sharp, screw-pointed instrument for removing broken catheters from the urethra. This cut represents an instrument which once helped me out of such a difficulty without the patient even knowing what had happened.

I had occasion to pass a soft rubber catheter, No. 11, into the bladder of a colored man. After drawing his urine and attempting to withdraw the catheter, imagine my dismay at having it break off in the prostatic region. Without mentioning the fact, I immediately passed the urethral forceps, and easily securing a grasp upon the broken end, at once withdrew the fragment entire.

On another occasion, I was unfortunate enough to have a pledget of absorbent cotton slip off my applicator and remain in the cavity of the uterus. Again my alligator urethral forceps came to my rescue, and I removed the foreign body without difficulty. The blunt end renders it as easy to introduce as an ordinary silver catheter. The cut represents the mechanism by which the greater part of the instrument works by a sliding motion, which in turn opens and closes the short alligator blades. With this instrument a firmer hold may be secured, and the fragment is not so liable to break. The compound silver catheters sometimes break off, and may be easily removed by the forceps—whereas the screw would be entirely useless. The greater safety of the former is obvious.

MEDICAL PROGRESS.

THE ACTION OF THE CONSTANT CURRENT IN ELECTRICITY APPLIED TO THE BRAIN ESPECIALLY AS CONCERNS THE EYE.—Dr. Gillet de Grandmont in the *Recueil d' Ophthalmologie* (August) after a series of experimental researches, reviews this subject at considerable length. In using this means for the relief of eye affections, he places the negative pole on the forehead near the termination of one of the branches of the tri-facial nerve, while the positive pole is placed near the superior conical ganglion of the sympathetic. The impression produced shows itself in various ways, viz., by flashes of light which are indicative of an irritation of the optic nerve and a corresponding disturbance of the retinal elements, and serves as a means of diagnosis to determine the degree of alteration of the retina. When, for example, an amaurotic does not see the brilliant blue light, but a feeble yellow glimmer, the prognosis would be far from favorable. The metallic taste in the mouth is not so easy of explanation, it has been supposed to be the result of a dialytic action upon the saliva; the iron taste has been supposed to be due to the decomposition of the elements of the blood containing iron, but this does not explain the copper taste. It is evidently due to a direct excitation of the lingual and glosso-pharyngeal nerves. The buzzing is due to an excitation of the auditory nerve. The dizziness is the result of a congestion of the encephalic centers. This appears only when the current is very strong, or when it is prolonged, and is very objectionable. Another objection to these strong and prolonged currents is the cicatrices which result on the forehead and neck from the destruction of tissue. The lowering of temperature which is shown on the use of a moderately strong current of electricity of short duration seems to negative the foregoing statement of congestion of the encephalic centers by a strong and long continued current; but this is explained by the action on the sympathetic and consequently upon the vaso-motor nerves. A current of feeble intensity stimulates the vaso-motors to the contraction of the vessels and lowers the temperature. A current of greater intensity or long continued exhausts and overcomes the excitability of the vaso-motors, and there is a vascular relaxation which admits of turgid-

ity and distension, congestion and sometimes even rupture of the vessels. An electrolysis also takes place in the aqueous humor, possibly also in the vitreous humor and in the crystalline lens, similar to that shown in the decomposition of water, when oxygen passes to the positive and hydrogen to the negative pole. This accounts for the direct diminution in amount of the aqueous humor, diminution in mass of the vitreous humor, and alterations in the crystalline lens, the latter being deprived of a portion of its water and showing a segmentation bordered by opaque lines.

The conclusions drawn are in effect that continuous currents applied to the more profound affections of the eye are of great use in therapeutics; that they act upon the circulation of the ocular globe, and that they act powerfully upon the secretions of the humors of the eye. They are useful wherever it is desirable to influence the retino-choroid circulation, to stimulate the nervous excitability of the retina, or to modify the secretion of the vitreous body. That is to say that atrophy of the optic nerve, glaucoma and chronic irido-choroiditis can be so relieved. As regards the strength of the current the greatest benefit was obtained from using 4, 6 or 8 Lechanché's elements of medium size. Whenever a larger number of elements were employed cerebral disturbance always followed without a corresponding benefit in the affection itself. A descending electric current applied for from four to five minutes once or twice a week, sufficed to give satisfactory relief. Strong or long continued currents are useless and dangerous in producing indelible cicatrices and in producing congestions of the brain. Dr. Gillet de Grandmont has never been able to obtain any important modification by this means in confirmed cataract.

EVERY PATIENT HIS OWN CASE-BOOK. — Dr. Howard A. Kelly tells us, in the *Medical News* for October 13th, that he has for more than sixteen months, while a resident in the Episcopal Hospital, been in the habit of mapping out on the superficialities of the body, in an indelible aniline color, the results of a physical exploration of the condition beneath. The markings remain fresh and clear from one to several weeks or longer, profuse sweating being the only symptom that is apt to obliterate them. He uses abbreviations to designate certain physical signs, the day and month being also recorded. The markings are made so prominent as to be legible over the largest of our clinical amphitheaters. This suggestion by Dr. Kelly may be enlarged upon to a very considerable extent. The clinical professor, it is true, would not have the opportunity of showing how a close and careful diagnosis is made, but he would be able to show a much greater variety of cases and have all his patients arranged like diagrams around him. In fever patients the daily record of the thermometer could be placed with the date on the borders of the axillary space, on the nates, or elsewhere, according to the mode of using it; what might be better still for this purpose, lines might be drawn in these situations to give the variations in the curve from date to date. Then in skin diseases, isolated points might be ornamented by recurring

areola of boundaries and dates to indicate progress from papular to vesicular, pustular, maturative, etc., etc. Many a poor fellow would like to have a boundary to his phagedenic chance to know if the thing is still spreading, or if it has begun to yield to treatment. Finally, it would give food and thought to the mind of the patient himself, too often left to its own resources. We hope these comments upon Dr. Kelly's suggestion will not be received amiss, as really he has given us what may be of great value within certain limits; but at the same time it does provoke one to thoughts irrelevant.

TEN CASES OF POISONING BY CANNED MEAT. — The *Archives de Médecine de Pharmacie Militaires* for August 15th gives the report of the surgeon accompanying a company of a French regiment on the march in the East, where ten boxes of conserve of bouillie beef were opened for distribution, each box being served to ten men, making each man's ration one hundred grammes of the viand. The corporal in charge of the distribution found that in one of the boxes, while there was no bad odor, in place of the firm jelly overlying the meat, there was a white, slightly viscous fluid, as if the jelly had liquefied. This he threw away, only giving the meat itself. One hour after the meal the ten men who partook of it were all taken ill with nausea, alimentary and bilious vomiting, vertigo, violent colics followed by diarrhoea, the stools being foetid and spumous, marked cramps in the thighs and legs, lasting four or five minutes, making all movement very painful. These patients were transferred to a hospital suffering from intense frontal headache with a sensation of throbbing at the temples. No heat of skin or febrile movement, pulse weak and slow but regular, respiration normal, abdomen slightly sensitive to pressure; urine scanty, cloudy, loaded with urates, but neither sugar nor albumen. The following day the symptoms were much less marked, cephalalgia and want of appetite remaining, more of the patients were able to get up and walk about, the third day the symptoms had all disappeared and the fourth day they all reported for duty.

These men had eaten only of the canned meat and their usual bread ration; they had drank coffee, no alcohol, and water of a good quality; none of their comrades had suffered in any way. The preparation of the canned meats had been recent—June, 1881—and the date of poisoning was January 13, 1882, not more than seven months. The ten boxes or cans were carefully examined: one of them had a peculiar and decided fishy odor, like sardines in oil, while all the others gave the healthy odor of meat fat. This can was recognized by the corporal as having contained the offending substance. There remained a little of the jelly and meat at the bottom of the can; the jelly had a sharp, disagreeable taste; the meat though insipid was eatable. The can itself showed nothing out of the way—no fissure, the solderings were intact, and the interior showed the brilliant metallic lustre of tin. There was a careful analysis made of both the jelly and meat, but it revealed nothing. The microscope was not used. The

report made was to the effect that these preparations could undergo a change which, without modifying either the appearance, color or taste of the viand, would endow it with toxic properties; and the only sign existing was the fishy odor on the sides of the can, the simple liquefaction of the fat not being indicative of any change in the viand itself.

ON THE USE OF SALICYLIC ACID IN PRESERVING ALIMENTARY SUBSTANCES.—Prof. Bronardel (*Annales D'Hygiene Publique*, Sept.) has made a report on this subject in which he has embodied some very useful information. In 1880 the Consulting Committee of Public Hygiene in Paris concluded that salicylic acid was a dangerous substance, the sale of which should be submitted to the same laws as govern the sale of other dangerous substances, and that its use in preserving alimentary substances required toxic doses to make it available; therefore, the sale of such preparations should be interdicted. These conclusions were adopted by the Minister of Agriculture and Commerce, who accordingly issued a circular interdicting the use of salicylic acid in this way. His circular called forth so many protests, and gave rise to so much discussion, that the subject was again referred to this committee, resulting in this report of Prof. Bronardel.

The role and the mode of action of salicylic acid and of its salts in the animal economy is very little known. We who, as physicians, prescribe it daily, recognize its good effects in certain diseases, but we are incapable for establishing a theory for its action. We know that once introduced into the system it is eliminated by the liver and by the kidneys. The most partisans of this agent all recognize that diseases of these organs contra-indicate absolutely its administration. All have cited examples of sometimes mortal accidents, where the liver or the kidneys have failed to perform their duty as emunctories. In such cases the salicylic acid, not being eliminated, or being eliminated imperfectly, has accumulated in the system, and the dose prescribed each day has been added to its fellows. The elimination differs with the age; it is rapid in infancy and adolescence, slow in old age. Dr. Chauvet has shown that in the old people the elimination of a single dose of 4 grammes is not complete earlier than six days after its ingestion. Even when elimination is normal, the salicylic acid does not pass through the system without undergoing some transformation; we find salicylic and salicyluric acid in the urine. According to the researches of Feser and of Friedberger we find in the urine only 63 per cent. of the salicylic administered to dogs, and none in the feces. Prof. Bronardel administered 20 centigrammes of salicylate of soda dissolved in table wine at meal time for twelve days to three persons in good health, one aged 68 years, the second 46 years, and the third 23 years of age, all three being submitted to the same alimentation. With the two younger, the perchloride of iron did not detect salicylic or salicyluric acid in the urine. With the eldest, the violet color appeared slightly on the fourth day, then increased, and was quite intense for four days after the use of the drug had been stopped, and did not completely disappear until the seventh day.

So, administered even in small doses (20 centigrammes per day), the salicylate of soda does not undergo the same transformation in all persons, and in many it remains in the system for an indefinite period; which variation renders it impossible to indicate, even for persons in health, a minimum dose.

Many persons are exposed to serious danger by the daily use of salicylic acid or of its salts even in relatively small doses. These are cases where there is no elimination, or where the elimination is incomplete; from senile alteration of the kidneys, or from nephritis with albuminuria. Hospital records show that the frequency of albuminuria has more than doubled during the last twenty years. It is true that many cases of albuminuria are relieved, as in pregnancy where the presence of albumen is but temporary, and men have lived for fifteen years and longer after albuminuria has been detected as a prominent symptom. In view of these facts, Prof. Bronardel advised a maintenance of the laws prohibiting the use of salicylic acid or its compounds in the prevention of alimentary substances.

EXTRACTION OF A POMMADE POT INTRODUCED INTO THE RECTUM.—M. Maurice Pollosom (*Syon Medical*, Sept. 16), extracted a vessel of this description from the rectum of a man aged 72 years, who said he introduced it for the purpose of relieving pain in that region by pressure, and that it passed up and beyond his control. It had been in place for fifteen days; he had received medical advice but no examination had been made, and medicines had been given by the mouth; fecal matter passed in liquid form around the vessel. The borders of the vessel could be readily felt with the fingers and traction made upon them, facilitated by a depression about a centimeter in length upon the border of the vessel, but rendered difficult from the fact that a piece had been broken off before its introduction. The sphincter also was very dilatable, indicating that this was not the first introduction of a foreign body. The muscular contractions of the rectum were very powerful and offered serious resistance, and the mucous membrane bordering on the rim of the vessel when pressed aside in one place doubled over the rim in another. Two pairs of forceps were applied at the broken portion, and while the mucous membrane was pushed away from the rim, traction was made and the vessel extracted. Slight hæmorrhage ensued but there was very little tearing of the mucous membrane. A large ball of fecal matter followed the extraction. The foreign body was an old glass pommade pot, cylindrical, six centimeters in length with a diameter of 47 millimeters, channeled externally; the broken portion represented one-fifth of the circumference. At eight millimeters of this circumference there was a circular projection of two millimeters which was very favorable for traction, and the projection was broken for one centimeter of its length. The patient was immediately relieved and left the hospital in thirty-six hours.

ON THE ACTION OF FREE HYDROCHLORIC ACID IN STOMACH DIGESTION.—Dr. N. Vogt has an interesting review of this subject in *Le Progrès Médical*,

September 15. As German writers of recent date have considered the absence of this as a free acid of great importance in semiology, Dr. Von den Velden by means of Kussmaul's pump obtained a certain quantity of matters contained in the stomach during digestion, and submitted them to the different reagents in order to detect the free hydrochloric acid. He obtained in tropéoline a substance of yellow color, which became red in the presence of mineral acids—organic acids not affecting it. In a case of typhus (?) he observed the disappearance of the free hydrochloric acid throughout the disease to return during convalescence. In simple dilatation of the stomach it was never wanting. In carcinoma it could not be detected. This could not be attributed to simple debility, because patients who, without carcinoma, had arrived at the last stages of marasmus still preserved the hydrochloric acid. It could not be the result of chemical action on the part of the cancerous secretions, because the light cases which were observed were cases of scirrhus and not ulcerated. In one case Dr. Von den Velden diagnosed carcinoma in the absence of all other symptoms, which diagnosis was confirmed by the autopsy. In another case where all the symptoms of a neoplasm were present, the presence of the hydrochloric acid indicated that it was not carcinoma, and the autopsy confirmed his opinion. In one case where the liver was affected and the stomach healthy the acid was present.

In his researches he determined that the saliva which had passed into the stomach mingled with the food, did not act upon starch when free hydrochloric acid was present, and that this acid did not make its appearance for one and a half to two hours after the ingestion of food, thus confirming Lehmann's experiments. Consequently, he distinguishes two periods in stomach digestion: the first where the saliva continues to exert its influence over the starchy substances, and the second coincident with the appearance of free hydrochloric acid when the peptones are found in quantity.

These views have been combated with vigor. Ewald affirmed that the action of the reagent was masked by the presence of the albuminates of blood, etc.; that in a number of cases of carcinoma, the reaction of the hydrochloric acid was present; that the two periods of stomach digestion did not exist, and that the diastasis was simply diminished and not suppressed when the gastric juice became acid.

Von den Velden replied that the chemical agents of Ewald were not pure; that he did not admit a specific action to carcinoma, but he wished to discover in what special cases there was an absence of the acid.

Dr. Edinger confirmed the disappearance of the acid in two cases of amyloid degeneration of the mucous membrane of the stomach, and was inclined to consider it as due to an obliterating endarteritis of the mucous arterioles. In his experiments he substituted for the Kussmaul pump, a modification of the old process of Reamur—by enclosing a bit of sponge the size of a nut in a gelatine capsule, suspending it

by a thread, to be swallowed by the patient. In 30 minutes the capsule having been digested, the sponge was drawn out and the juice expressed from it and examined.

Dr. Uffelmann prefers the violet of methyl as the reagent to determine the presence of the hydrochloric acid. Dr. Edinger criticises this and prefers tropéoline. Sassesky has found, in nine cases of fever, that the hydrochloric acid disappears when the fever is accompanied with dyspepsia.

Dr. Vogt, in concluding his article, recommends a series of researches of this character to be conducted in hospital service.

INTESTINAL OCCLUSION DUE TO A BILIARY CALCULUS WEDGED INTO THE RECTUM. (*Le Progrès Médical*, September 15).—This occurred in a woman 50 years of age, admitted to the service of M. Vulpian, at the Hotel Dieu. She died six hours after admission, the clinical history being very incomplete. There was great debility, feebleness of mental powers, facies expressive of suffering, temperature normal, pulse small and low, abdomen tympanitic, very much distended, the intestinal folds impressed on the abdominal walls, and pain on pressure of the abdomen. Marked dyspnea and the patient declared that for four days the bowels had not been moved and very little urine had been passed. Catheterism found the bladder empty. On post-mortem examination all the intestinal folds were found to be distended, the distension extending to the superior portion of the rectum. At the junction of the superior and middle portion of the rectum a regularly shaped hard body was felt through the walls of the intestine, which was so wedged in as not to be moveable. On opening the rectum this was found to be imprisoned by the intestinal mucous membrane, which was tumefied, but not ulcerated. The body was cylindrical in shape, $2\frac{1}{2}$ centimeters in diameter and $1\frac{1}{2}$ centimeters in height; it was composed of cholesterine. The whole of the large intestine was filled with fecal matter and two little calculi of cholesterine were also found. The gall bladder adhered to the transverse colon, where there was a very large ulceration putting the two cavities into direct communication. The ductus communis choledochus was little larger than normal, but contained no calculi.

THE ETHER HABIT.—Under the title of "Etheromane," Dr. Sedan (*Gaz. des Hôpitaux*, Sept. 15) gives some general references to the case of a young man, who, from the text, must have been nineteen years old when the observations were recorded, and who was for nine years in the habit of taking daily between 100 and 1,000 grammes of ether. When first seen by Dr. Sedan he was ten years of age—anæmia with a souffle accompanying the first sound of the heart, preserving nevertheless a very satisfactory general condition. He became one of the most promising students of the Lyceum, of a quick and brilliant intelligence, laborious and working with success. He confided to Dr. Sedan that he drank ether and that was the secret of his success—reasoned like a man and promised not to use the stimulant ex-

cept to assist the efforts of his intelligence. From that time he commenced increasing amounts of ether 20 to 30, 50, 80, 100 grammes a day, and as much at night in vapor, not drinking, not eating and leaving his ether intoxication to work out the most difficult questions in the higher mathematics. Getting up at night to obtain ether from pharmacies and imploring his parents to obtain it for him, medical advice failed to break up the habit. He consumed 900 grammes in one day, for the most part by the mouth. He has been said to have taken as much as one liter. And so this puny youth with a very feeble constitution indulged himself to this extent without any immediate disturbance, dying of mitral insufficiency which had developed itself gradually during a considerable period of time. During the last year of his life he used both ether and morphia subcutaneously.

THE CONSUMPTION OF HORSEFLESH IN FRANCE.—The municipal statistics of the city of Paris show that in 1881 the Parisians consumed 9,300 horses, and 400 asses or mules, which amounts to about 2,000,000 kilogrammes of meat. This animal is essentially herbivorous, and no noxious element is elaborated in its animal economy; whilst its organic resistance to disease is such that out of 3,000 horses which were cut up, M. Pierre, a well-known veterinary surgeon, did not find one in which the viscera showed any trace of morbid lesions. Like veal and young beef, the flesh of a young horse is white, and its nutritious qualities are in direct relation with the age of the animal which furnishes it; but when the colt is three years old, its meat, already deep colored, is very nourishing. When the horse has attained full age its flesh contains, in a maximum quantity, all the nutritive principles which are necessary. Liebig and Moleschott have pointed out that horseflesh contains more creative—that is to say, more albuminous matter—than oxbeef, which makes it largely nourishing. It has, in fact, been demonstrated that four kilogrammes of horseflesh are as nourishing as five kilogrammes of beef. The color is not displeasing, nor is the smell unpleasant; and its use in the treatment of diseases for which raw meat has been recommended, does not present the inconveniences which are often met with in the raw flesh of beef or mutton; in fact, every day large numbers of oxen, cows and sheep are killed which are known to be diseased, and of which it is feared to lose the sale. This can never be the case with regard to the horse, for most horses used for food are sent to the slaughter-house simply because they have become old or incapable of working, or because some accident has disabled them. —*British Med. Journal*, Sept. 15.

METHOD OF RELIEVING THE IRRITATION CAUSED BY CONTACT OF THE EYELASHES WITH THE EYEBALL IN SIMPLE OR SENILE ENTROPION.—Dr. Charles Bell Taylor has a wood-cut in the *Lancet* of September 29, illustrating a steel clip which seizes the eyelid in such a manner as to at once relieve inversion, and he affirms by wearing the instrument a short time the patients are frequently cured.

SYMPTOMS OF CHRONIC CEREBRAL HYPERÆMIA PRODUCED BY A FOREIGN BODY IN THE AUDITORY CANAL.—Dr. Pasquier, in the *Bulletin Médical du Nord*. (August), describes the case of a peasant woman 50 years of age, robust, free from previous disease, still menstruating, but not as regularly as previously, who complained of habitual pain in the head increased by noise, heat or bright light, making all work painful. It was accompanied by painful pulsations in the forehead. There was insomnia, and sleep troubled by fatiguing dreams; also a ringing in the ears; but the most troublesome symptom was vertigo, sometimes so intense as not to allow her to stand up, and accompanied with nausea and almost complete loss of consciousness. She felt this for the first time, she said, one day when an insect entered her ear, six weeks before. She thought the sharp pain experienced at the moment might have been the cause of the trouble, but the insect did not actually get into the ear; immediately after the accident a wing was taken out and the rest followed. Audition was good.

The physician who had attended the patient, treated her for cerebral congestion with mustard foot-baths, repeated purgatives and blisters, without benefit.

The auditory canal showed nothing abnormal. The anterior portion of the tympanum had undergone no appreciable modification, but back of the handle of the malleus, directly parallel with it and descending to the postero-inferior quarter of the tympanum, was a grayish, elongated body, presenting bright facets. It seemed to be directly attached to the membrane of the tympanum. The handle of the malleus and the neighboring tympanic membrane were also markedly vascular. Dr. Pasquier took this to be the elytra of an insect and tried to extract it by injections of warm water without avail; introducing the speculum anew, he found, at the bottom of the auditory canal a slender prolongation of a shaggy appearance which he took to be a part of a leg of the supposed insect; removing it with the forceps he found it to be an oat-grain, still covered in part by its numerous membranous envelopes. The symptoms detailed completely disappeared on the extraction of the oat-grain.

BARNEY, JOHN W., M.D., was born in St. Johnsbury, Vermont, January 19, 1816, and was educated at the Caledonia Grammar School. He then read medicine, graduating at Woodstock, Vermont, in 1841. Afterwards, as this college was discontinued about 1860, he received an honorary degree from Dartmouth Medical College in 1873. He located in Lancaster, N. H., where he was in active practice until 1870, when he removed to Concord, remaining there until his death, March 4, 1883.

He was a member of the New Hampshire Medical Society, also a member and an ex-president of the White Mountain Medical Association, from which he was a delegate to and became a member of the American Medical Association in 1865.

G. P. CONN, M.D.