

returns sooner than one removed by caustics. The suppuration attendant upon the latter seems to remove the remaining cancer cells, while incision leaves them to set up anew their destructive proliferation.

There are also cases where surgical interference is out of place. In some localities it is next to impossible; and where there are any distinct signs of a cancerous diathesis it is certainly vain to resort to the knife.

Then the pain of cancer is a most distressing and prominent symptom, demanding the most active measures to relieve it.

All these considerations should give to the therapeutics of malignant growths a more prominent position than has yet been awarded it.

The therapeutic treatment of cancer has been in three directions: by internal medication, by local external applications, and by injections into the substance of the growth.

Of internal remedies, *coniium*, lauded by STÖRCK, of Vienna, still retains the first rank, in spite of theoretical objections to its efficacy. The best preparation is thought by some to be the freshly-prepared *succus conii*. (For formulæ see below.)

*Condurango*, which has fallen wholly into disfavor in this country, has recently received strong testimony in its support, in cancer of the stomach, from various German physicians.

The *phytolacca decandra* has been praised by some American physicians for its alleged power to prevent the development of cancer. Not only is the fluid extract given internally, but the inspissated juice of the leaves is applied in the form of a plaster at the same time, either alone or combined with chloride of zinc and opium.

Sir BENJAMIN BRODIE used to give his cancerous patients *liq. potassæ*, f. ʒj, *thrice daily*. Sir JAMES PAGET, in his "Clinical Lectures," says that he also has followed this treatment, often without effect, "but frequently it has given relief from the burning, aching and bursting pains which have been connected with the cancer." Sir JAMES considers it indicated in the gouty diathesis, and believes that Missisquoi water sometimes does good in a similar manner.

Sir ASTLEY COOPER was wont to attach importance to the exhibition of *ammonia*, especially in uterine cancer. His favorite prescription was:

|         |                            |           |    |
|---------|----------------------------|-----------|----|
| 679. R. | Sodii carbonatis,          | gr. xxx.  |    |
|         | Ammonii carbonatis,        | gr. v.    |    |
|         | Tincturæ calumbæ,          | f. ʒj.    |    |
|         | Infusi gentianæ compositæ, | f. ʒ iss. | M. |

This amount to be taken thrice daily.

Dr. WASHINGTON L. ATLEE, of Philadelphia, attaches value to the prolonged and even constant use of *arsenic*. After excision of the cancerous growth, this drug would seem to have a retarding influence on its re-appearance.

In *cancer of the stomach*, Dr. JAMES T. WHITTAKER, of Cincinnati, has reported apparently successful cases from the administration of *bisulphide of carbon*, gtt. ij-iv, in oil of sweet almonds, three times daily; but the improvement he noted may have been owing to the anæsthetic effect of the remedy.

For injections into the substance of the growth, *dilute acetic acid* has been used with unquestioned success in epithelial cancer. Pure *carbolic acid*, injected underneath the cancerous sore, is said by Dr. BARTHOLOW to limit the extension and retard the growth of the disease.

Dr. HASSE, of Berlin, injects *pure alcohol*, to which one per cent. of ether has been added; this he throws, not into the growth itself, but around its edges, thus obliterating the lymphatics. The injections are repeated once every week or every other week.

Dr. WYNN WILLIAMS, of the Samaritan Hospital, London, employs *bromine*, one part to three of pure alcohol, of which gtt. v-x are injected into the tissues by means of a long syringe with a platinum nozzle. The solution develops heat, and should be prepared some time before used. With it he claims striking success in *uterine epithelial cancer*. Dr. BENJAMIN RHETT, of South Carolina, has also used with success (*Charleston Medical Journal and Review*, Oct., 1874,) the following:

|         |            |           |    |
|---------|------------|-----------|----|
| 680. R. | Brominii,  | gtt. xij. |    |
|         | Alcoholis, | f. ʒj.    | M. |

Inject from four to ten drops into the growth, and touch the surface lightly with it.

DR. JOHN HUGHES BENNETT, LONDON.\*

This author, in speaking of the rational treatment of cancer, states that its object should be retardation, and, if possible, resolution. To accomplish these, four means deserve consideration:

\* *Cancer and Cancerous Diseases*. London, pp. 237, seq.

1. *Cold*.—The external application of cold is one of the most powerful means we possess for retarding cancerous growth. In cancers of the breast it may be applied by a caoutchouc bag filled with ice and suspended round the neck.

2. *Dryness*.—As moisture is essential to cell growth, if the part could be deprived of it, the proliferation must cease. This has been sought for by tying the arteries leading to the affected tissues. MARGENDIE and JOBERT reported several successful cases, where disappearance of the tumor followed, even in cases diagnosed as true cancer. The supply of blood, however, furnished by the anastomotic arteries has prevented the effective application of these measures. While external dryness can produce little effect, wet dressing and lotions should be avoided as hastening the development of the disease.

3. *Pressure*, applied externally to tumors believed to be cancerous, has certainly, in a number of instances, been successful in retarding, even in altogether removing them. RECAMIER and others claim quite a number of cures by this method. In order to secure its proper application, an apparatus has been invented by Dr. NEIL ARNOTT. It consists of a spring, an air cushion supported by a flat resisting frame or shield, a pad and two belts. The pressure can be graduated as desired. It gives great relief from pain, and is useful in ulcerated cases in restraining hemorrhage. In some instances it has brought about complete resolution.

4. *Locally*.—It has been observed that in some districts cancer is more frequent and runs its course with greater rapidity than in others. Observations of this kind may be turned to the profit of those who are able to seek change of climate.

PROF. ESMARCH, OF KIEL.

This very eminent surgeon read an important paper on the medical treatment of cancer in the Sixth Congress of the Society of German Surgeons (1877.) He expressed his opinion that the scrofulous and syphilitic dyscrasie predispose to malignant growths, and this furnishes a therapeutic hint. As regards the treatment of cancer, it is well known that many malignant growths are capable of cure by early and sufficient extirpation; but in very many cases the patients come too late to allow an energetic radical cure to be carried out. Dangerous tumors are often treated by insufficient means, and allowed to become malignant; and then the patients come to the surgeon, who is obliged,

to his regret, to perform a difficult operation. What is to be done in cases no longer fit for operation? To tell the patients that nothing more can be done in the way of operation is to pronounce their death-warrant; but there ought to be a final remedy to be used in certain cases. LANGENBECK, of Göttingen, had under his care a woman with cancer, for whom he ordered arsenic. The woman, believing she could not recover, took the arsenic in large quantities, for the purpose of suicide; the result, however, was the cure of the disease. Cancer is essentially an epithelial growth; and the therapeutic action of *arsenic* on skin-diseases indicates that it must have a special influence on the epithelial cells. Arsenic is also given to horses to make their skins smooth. Hence there is a reason for using arsenic in cancer; but it must be given in large doses to produce any result—even until symptoms of poisoning are produced. In this way Dr. ESMARCH has produced astonishing results in some cases of cancer. One woman who had a cancer of the lower jaw, too far advanced for operation, was completely healed by the use of arsenic. Modern experience of the action of arsenic in other maladies, encourages a trial of its action in cancer.

The reputation of arsenic in this disease is of old date; but Dr. ESMARCH has been led to employ it energetically in hopeless cases, and with surprising results. He showed the photograph of a woman who as a child was scrofulous. She had scrofulous glands in the neck, which, during her pregnancy, developed into a lupous sarcoma. Extirpation of the whole disease by the knife was impossible; Dr. ESMARCH therefore cut away the tissue of the face, and laid charpie soaked in chloride of iron on the remaining diseased portions; he then applied a powder of morphia and arsenic, with some calomel and sugar. A thick, leathery eschar was formed, after the falling of which, cicatrization soon took place. Another woman came into his clinic with cancer of the breast, in which adhesion to the ribs had taken place. Dr. ESMARCH prescribed arsenic internally, and, for external application, the powder above mentioned, to be applied daily; this she must have at last have done by teaspoonfuls. In the next session she returned; all traces of the cancer had apparently disappeared, and she said that she had but slight pain.

Besides its destructive action on growths, arsenic is also an antiseptic. Dr. ESMARCH has also obtained some remarkable results in his practice from Canquoin's chloride of zinc paste (Index) and from

electrolysis. In a case of small-celled sarcoma of the thigh, as large as a man's fist, *electrolysis* by a weak current, applied six hours daily, almost completely removed it; but the man would not wait. A year later he returned, without a trace of the tumor. There was one class of malignant diseases in which Dr. ESMARCH had obtained some remarkable results from the use of the iodide of potassium. These are *sarcomatous* tumors. Many of these may be the product of old and concealed forms of syphilis. Psoriasis of the tongue and rodent ulcer are also, at times, syphilitic products, and are greatly benefited by iodide of potash internally, and iodine ointment.

DR. A. WINEWARTER, OF GERMANY.

Certain malignant glandular degenerations have been successfully treated by this surgeon with *arsenic*. He states, in the *Medicinische Jahrbücher*, 1877, the following conclusions:

I. The treatment of both malignant lymphomata and leukæmia, by means of arsenic, is efficacious, since it induces a resorption of the hyperplastic glandular tissue.

II. Arsenic owes its favorable influence to its inherent power of inducing a process of decomposition in albuminous tissues, and especially glandular tumors, which makes resorption possible.

III. Moreover, the local effect of injection and the arsenical fever contribute to the diminution of the size of the tumors. Cures accomplished by arsenic may last for a year, and the recurring tumors are as susceptible to treatment as the primary. In malignant lymphomata the treatment by means of arsenic is unquestionably more efficacious than operation. Operative measures are to be accompanied by internal treatment in every case.

DR. MARSDEN, LONDON CANCER HOSPITAL.

This gentleman, after an experience of over six thousand cases of this disease, considers *arsenic* as superior to any other agent in cancer. He believes that, with early treatment, nine out of ten cases may be cured. He recommends it in every form of cancer, except the cystic or colloid varieties—provided that the disease does not exceed four inches square in size—when removal by the knife appears to be the only remedy. Arsenic may be used in this way for cancers in every situation except the interior of the mouth or nose, localities where

the nature of the remedy makes it dangerous. The formula used at the cancer hospital is the following:

689. R. Arsenious acid, ʒij.  
Mucilage of gum acacia, ʒj. M.

Mix into a paste too thick to run. This is to be spread over the entire surface of the cancer, provided this does not exceed one square inch in size; a bit of dry lint is then placed over the sore, in order to absorb any excess of paste. In the course of an hour the lint becomes dry and hard, and adheres firmly to the parts.

In the course of twenty-four hours some inflammatory action is visible in the tissues immediately adjacent to the cancer. There is often also some pain, but this is not usually severe, and lasts but for a day or two. After the lapse of two or three days, according to circumstances, bread-and-water poultices, changed every few hours, are to be constantly applied over the sore. A distinct line of demarkation is usually to be seen by this time, and the slough gradually separates and comes away, leaving a healthy, cup-like depression, varying in depth and size according to the mass removed. Granulation proceeds rapidly, and the case is then treated as a simple ulcer. The slough separates at periods varying from six to thirty days, according to its size. The disease usually comes away entire with the slough; but where this is not the case the paste is to be applied to the remaining portion, as in the first instance, every second or third day, till the desired effect is produced.

Dr. M. KUHN, who has also used the arsenical pastes with advantage, directs attention to the importance of applying them, not directly to the surface, but to the substance of the growth. He advises the previous application of caustic potash, so as to produce an abraded or raw surface, which can then be acted on directly by the arsenical agents. It is to the want of adopting this preliminary step that Dr. K. attributes the failure of arsenic in many cases. (*Medical and Surgical Reporter*, January, 1870.)

MR. C. H. MOORE, MIDDLESEX HOSPITAL, LONDON.

In the article on "Cancer," by this gentleman, in Holmes' larger work on surgery, he commends the *tincturi ferri chloridi* internally. "Iodine, opium, and especially lead," he adds, "appear the most effective in retarding the growth of the tumor."

682. R. Plumbi iodidi,                                   āā   ℥ ij.  
 Pulveris opii,                                     ℥ ss.  
 Ferri sulphatis exsiccati,                         ℥ ss.  
 Glycerinæ,   q. s.         M.

To make a convenient paste. Apply to the swelling, so that it will thoroughly moisten the surface.

For tender and painful ulcers he advises the following:

683. R. Fresh stramonium leaves,                     ½ lb.  
 Lard,   4 lbs.

Mix with gentle heat for some time and strain. Spread on cotton wool and apply to the part.

DR. LANDOLFI, OF NAPLES.

This practitioner has obtained a wide celebrity through the use of a preparation which he claimed to be a specific cure in cancer, providing that the growth is accessible, and that the system is not already too deeply implicated in the cancerous cachexia. The formula he usually employed, although it differed somewhat in the relative proportion of the ingredients, was the following:

684. R. Zinci chloridi,   āā   ℥ j.  
 Auri chloridi,   }   q. s. to form a thick paste.  
 Antimonii chloridi,   }   }   }   }   }  
 Brominii chloridi,   }   }   }  
 Farinæ,   }   }   }  
 Aquæ,   }   }   }

To be applied on small portions of linen to the ulcerated surface.

The essential element he looked upon as the *chloride of bromine*, the quantity of which he often increased to 3 ij or 3 iij. The chloride of zinc he used chiefly for its hæmostatic qualities, and increased this ingredient when there was a marked tendency to hemorrhage. The pain of the application is considerable, and must be allayed by opiates. The application need not remain on more than twenty hours, and may then be replaced by an emollient cataplasm. About the eighth day the eschar should become detached and leave a healthy, granulating surface. If any points remain of less satisfactory appearance, or still presenting cancerous alterations, a little of the caustic paste is again to be applied.

Internally he believed it best, though not in all cases indispensable, to administer the chloride of bromine internally in doses of  $\frac{1}{10}$  or  $\frac{1}{12}$  of a drop, in pill form twice a day, for from three to six months.

LONDON HOSPITALS.

685. R. Zinci chloridi,                                     ℥ iij.  
 Antimonii chloridi,                                     ℥ ij.  
 Amyli,   ℥ iv.  
 Glycerinæ,   q. s.         M.

Powdered opium may be added, to lessen the pain caused by this caustic, which is employed with success to destroy cancerous tumors.

686. R. Extracti belladonnæ,                                 ℥ ss.  
 Acidi hydrocyanici diluti,                             f. ℥ j-ij.  
 Glycerinæ,   f. ℥ j.  
 Aquæ destillatæ,                                     Oj.         M.

One fluid ounce of this solution is mixed with from one to three fluid ounces of distilled water, and compresses dipped in this mixture are applied to the cancerous tumors as a soothing lotion.

687. R. Opii pulveris,                                     ℥ j.  
 Extracti conii,   ℥ ij.  
 Acaciæ pulveris,                                     q. s.         M.

Divide into forty pills. One or two to be given in the evening, to combat the pains of cancer which cannot be operated on.

688. R. Conii foliæ,   āā   ℥ iss.         M.  
 Adipis,   }

The conium leaves, which should be fresh, are boiled over a slow fire, in the lard, until they become friable, and then filter. This pomade is to be employed in frictions on cancerous tumors, at the same time that stramonium is given internally. If fresh conium leaves cannot be obtained, the pomade may be made with the extract of conium and lard.

MR. CAMPBELL DE MORGAN.

This London surgeon first used *chloride of zinc* in cases of cancer, with the idea that the frequency of the return of the disease after operating was due to the remains of its germs on its cut surface; and he hoped that the application of chloride of zinc to the wound would destroy any cancer-germs that might be scattered over it, and thus diminish the chance of recurrence. His prescription was:

689. R. Zinci chloridi,                                     gr. xl.  
 Aquæ,   f. ℥ j.         M.

With this he freely washed the surface of the wound after operating.

M. MAISSONNEUVE, OF PARIS.

This distinguished surgeon attacked cancerous tumors with *caustic arrows*. This composition was as follows:

690. R. Zinci chloridi, 1 part.  
 Farinæ (wheaten flour), 3 parts.  
 Aquæ, q. s. M.

Make into a paste.

The arrows are formed by rolling this paste into cakes, which are then to be divided into strips of any desirable shape or size; then by drying they may be made to assume any desired degree of firmness or tenacity. MAISSONNEUVE uses the arrows in three forms: 1. Conical, for circular cauterization; 2. Lance-shaped, for cauterization in parallel lines; 3. Spindle-shaped, for central cauterization.

When used, they are introduced into the body of the tissue, so as to effect the destruction from *within outward*. If the tissues are soft, the arrows will penetrate them; if not, a passage must be made with a scalpel. This can usually be done without loss of blood if the arrow fills the wound completely.

"1. *Circular Cauterization* is specially applicable to tumors which project above the surface, as in tumors of the breast and the like. The arrows are introduced around the tumors at the distance of one-third to one-half an inch from one another, and the tumor is effectually destroyed in one hour, or two at most. By this method very little of the healthy tissue is destroyed, scarcely any blood is lost, and there is very little reaction.

"2. *Cauterization in Parallel Lines*.—In this method the caustic is introduced in parallel lines, so as to divide the substance to be destroyed into thin laminae, which yield promptly to the destructive properties of the agent. This method has been found most useful in tumors that are deep-seated—as in the neck, the rectum, the uterus, etc.

"3. *Central Cauterization*.—In this method an opening is made with a scalpel carried through the middle of the tumor, and the arrows are pressed into this until they are completely buried in the tissues. This method is less energetic than either of the others, but is useful in superficial tumors. The chief advantages claimed for cauterization by MAISSONNEUVE are its powers of preventing purulent infection, erysipelas, surgical fever, hemorrhage, (it is a powerful hæmostatic,) and other dangerous contingencies of surgical operations."

DR. J. W. BRIGHT, OF KENTUCKY.\*

This author, who claims to have had a long and successful experi-

\* *Cancer, its Classification and Remedies*. Phila.

ence in the treatment of cancers, depends almost exclusively on certain preparations of the *chloride of zinc*. These are four in number, as follows:

691. R. Extracti podophylli radicis, ʒj.  
 Zinci chloridi, ʒiij.  
 Amyli,  
 Santali pulveris, āā ʒj.  
 Aquæ, q. s. M.

Make a thick paste.

The object of the starch is to give tenacity to the paste, and the red sanders to porosity, so that the full effect of the active constituents may be felt by the sore.

692. R. Zinci chloridi, ʒss.  
 Aquæ, q. s. ad saturandum.

Keep in a glass-stoppered bottle, and apply with a glass brush.

The third preparation is like the first, with the substitution of carbolic acid for water. The fourth is an arrow of chloride of zinc. Take enough starch to absorb the moisture of the chloride, make a stiff paste, roll into sheets, cut the arrows to a point, and dry at a heat of 212°. Keep in a glass-stoppered bottle.

In using the paste it is spread on a piece of cotton or linen cloth, large enough fully to cover the sore and its margin. It may then be confined with adhesive strips, and renewed once in twenty-four hours. After three or four applications in this manner, the surface of the sore is white and hard. A light poultice should then be applied, and in about a week the slough loosens, and should be followed by healthy granulations. If small lumps remain, or subsequently appear on the edges of the scar, they will usually disappear by the application of the following ointment:

693. R. Iodinii, ʒj.  
 Brominii, ʒj.  
 Adipis, ʒj. M.

When, after removal by the paste, there seem to remain points of cancerous tissue at the bottom of the sore, they should be brushed with the saturated solution of zinc.

In employing the arrows, they are inserted around the tumor to the proper depth, punctures being previously made with a bistoury.

In connection with this local treatment, tonic, aperient and altera-

tive remedies must be prescribed as needed, and the hygienic and mental condition of the patient put upon the best possible basis.

## DR. O CROOK, OF OHIO.

In the *Medical and Surgical Reporter*, August, 1869, this writer urges upon the profession the internal use of *poke root* in cancer. He prepares it as follows :

694. R. Phytolacæ radicis,  $\bar{\zeta}ij.$   
Alcoholis, Oj.

Macerate fourteen days and filter. Dose, fifteen drops to a tablespoonful after eating, the dose to be increased as fast as can be done not to excite decided nausea.

The effects of the medicine should be apparent in two or three weeks, lessening the pain of the cancer and arresting the growth of the tumor.

Locally, he applies the *poke root* grated, in the form of a poultice. But when the cancerous growth had already progressed until spontaneous suppuration had taken place, he believed the action of the root was no longer curative.

## DR. FELL'S PASTE.

695. R. Zinci chloridi,  $\bar{a}\bar{a}$   $\bar{\zeta}j.$   
Pulv. sanguinaræ radicis, q. s. for a paste.  
Amyli,

Apply on pieces of kid or wash-leather.

This preparation, which has been revived of late years, is but a modification of "Dr. Fell's cancer salve," famous half a century ago. It is a useful application in cancerous sores.

Another form of the same is :

696. R. Zinci chloridi,  $\bar{a}\bar{a}$   $\bar{\zeta}j.$   
Pulv. sanguinar. rad.,

Rub together in the open air to a stiff paste. Apply on cotton-wool to the entire surface of the cancer. After about two hours it should be removed. The process may be repeated daily "until the wound presents that freedom from cancerous particles which one soon learns to recognize in using this paste." (Dr. J. E. NICHOLS, *Chicago Medical Journal*, March, 1875.)

## M. MICHEL, OF PARIS.

The famous *sulphuric acid paste*, devised by this operator for removing external tumors, is made and applied in the following way : Asbestos, as soft and free from grit as possible, is reduced by rubbing between the hands to the finest possible fleecy powder. It is then mixed thoroughly with three times its own weight of strong sulphuric acid ( $\text{SO}_3 \text{H} \cdot \text{O}$ .) A mass is thus formed which may be easily worked with a silver or gold spatula into any size or shape corresponding to the tumor to be destroyed. In the application of the caustic, the adjoining healthy parts of the skin are carefully protected by applying a zone of collodion and pads of linen, and the patient is so placed that the surface of the tumor is perfectly level. The saturated acid asbestos is then laid on the surface to the necessary thickness. Rapid destruction of the tissues follows, with, after the first half hour or so, but little pain. An oozing of clear watery fluid appears, which must be carefully sopped up. After twelve or fourteen hours' action, the first application is to be removed, and, if necessary, a new portion of smaller size adapted to the sore. After this has been applied for twelve hours the operation is complete, and the healing of the deep excavation alone requires to be attended to.

## JAMES E. GARRETSON, M. D., D. D. S.

This author remarks that in the treatment of *schirrhus of the tongue*, the use of caustic remedies is widely employed, and in instances recommended by very high authority. His own experience would suggest the following caustic :

697. R. Zinci chloridi,  $\bar{a}\bar{a}$  gr. v.  
Aluminis pulveris, gr. ij.  
Acidi tannici, gr. iij.  
Ferri persulphatis, q. s. for a paste.  
Glycerinæ,

To apply this paste, draw the tongue forward, hold, and dry it well with a napkin. Lay some crystals of zinc on the part, and cover over with the paste. This may be allowed to remain as long as the tongue can be kept dry. Finally, wash the *débris* away, and the application is completed.

If severe glossitis supervene after such an application, it will imply that much more harm than good has been done. In making a caustic

impression under such circumstances, the parts should be quickly killed, not excited or provoked.

The galvanic cautery is thought by many to be greatly preferable to the potential cauterants.

Injection of *persulphate of iron* is still another means much employed and commended. Dr. GARRETSON, however, has not found it to answer his expectations.

Cancerous *epithelioma of the tongue* must either be extirpated in the most radical manner, or be soothed into quiet. Section of the lingual nerve and ligation of the lingual artery have been performed with the latter view.

Where operative means have not been thought advisable, patients have expressed themselves as receiving the greatest relief from the local employment, by means of an atomizer, of the following combination:

|         |                         |        |    |
|---------|-------------------------|--------|----|
| 698. R. | Acidi carbolicæ fluidi, | f. ℥j. |    |
|         | Sodii sulphitis,        | ℥j.    |    |
|         | Aquæ,                   | f. ℥x. | M. |

For an atomization.

In *epithelioma of the lip*, also, this preparation will be found to afford much relief from pain, and to be softening and soothing; it has even seemed to possess a marked influence in retarding the progress of the disease. It may also be administered internally in teaspoonful doses.

The severe pain requires liberal administration of anodynes. Hypodermic injections of morphia may be used. For continuous stomachic administration, preference is to be given to the *bi-meconate of morphia*; the officinal strength of this medicine is that of laudanum, twenty-five drops representing one grain of opium.

DR. MORRELL MACKENZIE, OF LONDON.

*Cancer of the Æsophagus*.—As an aliment in this disease, milk is of the most value. The patient must, as far as possible be kept free from pain, and rest at night insured. Subcutaneous injections of morphia offer the most suitable means of effecting this end. In cold weather, the apartments should be kept warm, all the conditions of the patient tending to lower his bodily temperature. As the disease advances, absolute aphagia is established, and the patient must then be fed by nutritive and stimulating enemata. Instead of the large liquid

enemata which are commonly employed, it is better to use the semi-solid compounds of LEUBE, who has shown how greatly rectal digestion is assisted by the presence of pancreas.

The former, recommended by Dr. M., is:

|         |                          |      |    |
|---------|--------------------------|------|----|
| 699. R. | Beef, mutton or chicken, | iv.  |    |
|         | Pancreas,                | ij.  |    |
|         | Fat,                     | ℥j.  |    |
|         | Brandy,                  | ij.  |    |
|         | Water,                   | ℥ij. | M. |

These ingredients, mixed together, will measure about six ounces. The meat sweetbread and fat must be first passed through a mincing machine. It is often desirable to add five or ten drops of laudanum to the enema, which should not be administered more than once in the twenty-four hours. The rectum should be washed out twice a week with warm water, three or four hours before giving the nutritive injection. It is necessary to use an enema-pipe with a bore of half an inch, otherwise the nutritious mass will not pass.

DR. NATHAN S. DAVIS, OF CHICAGO.\*

*Cancer of the Stomach*.—This author is of opinion that in gastric cancer at any stage there is no reason in experience to believe the disease will yield to any kind of treatment.

The principal thing to be done is to confine the diet to bland, simple substances, which can be absorbed by the coats of the stomach; and these should be given in small quantities, so that what is taken at one time may be absorbed, without leaving any accumulation to be carried through the pylorus.

When the cases are somewhat advanced, the bowels are frequently not moved for many days, and the patient importunes for a cathartic medicine; but physic will only increase the distress, and should be withheld.

For the amelioration of the pain and to assist nutrition, Dr. DAVIS has employed with much success a solution of carbolic acid, rendered anodyne by paregoric, as:

|         |                           |           |    |
|---------|---------------------------|-----------|----|
| 700. R. | Acidi carbolicæ crystal., | gr. vj.   |    |
|         | Glycerinæ,                | f. ℥ ss.  |    |
|         | Tinct. opii camphoratæ,   | f. ℥ iss. |    |
|         | Aquæ,                     | f. ℥ ij.  | M. |

One teaspoonful every three or four hours.

\**Clinical Lectures on the More Important Diseases.* Philadelphia, 1875.