

that the iodine preparations should be given to aid in the absorption of the new-formed tissue, as well as to treat a possible specific basis for the arteriosclerosis. If the resulting gangrene is so extensive that amputation is necessary, this, of course, must be done, but well up in healthy tissue, where this is possible.

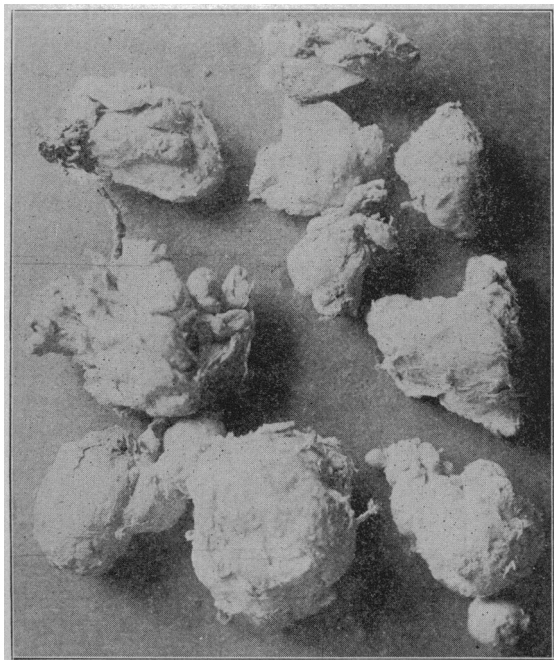
224 North Meridian Street.

RETENTION OF URINE CAUSED BY ENLARGED PROSTATE AND RELIEVED BY PROSTATECTOMY.*

GEORGE W. KING, M.D.
HELENA, MONT.

Patient's History.—Twelve years ago the patient had an attack of retention while out prospecting and had to travel a distance of fifty miles to reach medical aid. He was easily relieved by the use of a catheter and instructed in the care and use of the instrument. By its aid he was enabled to go on with comparative comfort until a recent date.

For many years he has resided alone in a cabin situated near an infrequently traveled road, and when the present attack of retention came on there was no available way of securing assistance. He had been a sailor at one period of his career and having a flag in his possession he naturally conceived the idea of floating it at half mast as a distress signal. After some days, fortunately, it attracted the attention of a passerby who went into the cabin, and, discovering his condition, took him to the nearest physician where an attempt to pass a catheter was made without success.



View of the prostate removed; weight, 5½ ounces.

Hospital History.—He was immediately sent to the hospital and came under my care. He had a history of five days' retention and there were already symptoms of uremia. Obviously the first thing to do was to relieve the retention by the usual method if possible. The prostatic obstruction was found to be so great that no form of soft catheter could be passed. A metallic instrument with long curve was made to enter the bladder without serious difficulty and a considerable quantity of bloody urine evacuated. The amount taken away did not exceed one-third of the contents of the bladder. This was amply sufficient to afford temporary relief, which was the most urgent indication at that time. By this plan too sudden reduction

of pressure on the bladder, ureters and kidneys was avoided and time was gained for further investigation. The introduction of the instrument caused so much pain it was used but twice in the twenty-four hours instead of at shorter intervals. This treatment was continued during the three days preceding the operation. The obstruction being seated so high up in the pelvis, it was a debatable question which route to choose. The peroneal was finally decided to be the safer in this instance and was therefore given the preference.

Operation.—The operation was begun with the expectation that it would be difficult and so it proved to be. The growth could not be brought down by the sound or by any of the tractors designed for the purpose; hence the work had to be done almost entirely by the fingers, guided by the sense of touch, to define the boundaries of the diseased tissue. By patience and perseverance the mass, as seen in the accompanying illustration, was removed and free drainage established. The patient withstood the operation remarkably well for one of his years; there was no shock, and no elevation of temperature after the reactionary stage had passed. He was allowed to get up when he pleased. In fact, he did get out of bed on the day following the operation, but of course did not move about much for a day or two.

His convalescence has been exceptionally rapid, a small amount of urine came through the natural passage on the sixth day, which is not the rule. With a complete healing of the wound I believe his troubles will be over.

ICE-BAGS AND WHEN TO USE THEM.

P. A. AURNES, M.D.
MINNEAPOLIS, MINN.

The reluctance with which the laity used to submit to the application of ice-bags or to the use of cold water in disease is fast disappearing. Wholesome and general awakening to the full appreciation of the great remedial power possessed in the scientific application of simple means like water and its different forms, vapor or ice (hydrotherapy, thermotherapy or frigerotherapy) instead of relying on antipyretic and analgesic drugs, when fighting systemic or localized inflammations, is evidence that the teaching of men like Esmarch, Winternitz, Schlikoff and others is gaining ground.

There is, however, still field for educational work, not alone among the laity, but also among physicians, as there are many who still keep on "crossing the river in going after water," as the saying is.

Many medical men know the value of cold applications as well as the danger of antipyretic and analgesic drugs, yet they lack the moral courage to carry theory into practice from fear of being discharged by an ignorant patient for applying anything so "dangerously" cold as an ice-bag. Furthermore, some men relegate themselves to the rear guard of the profession by condemning at all times the use of hydro-therapeutic measures and cold applications in any form, and prefer to stick to the dirty, antiquated flaxseed poultice or to some proprietary "mud" preparation with its cure-all qualities.

Scientifically considered, heat and cold differ only in degrees, but let it be understood that, although the physiologic effect during their application within certain limits may be identical, there is a distinct difference in the results obtained, when they are applied to parts, where a pathologic process is in evidence.

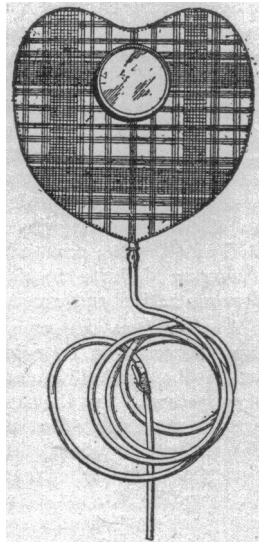
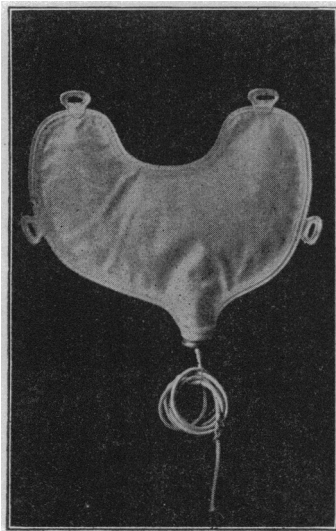
Thus a warm poultice application tends to relieve pain, but it also tends to favor the formation of bacterial growth—the formation of pus—when pyogenic germs happen to be the cause of the inflammation. On the other hand, if an ice-bag be applied to such a region it will not alone relieve congestion and pain, and that

* Presented at a meeting of the Lewis and Clark County Medical Society.

more effectually than any bearable hot application ever can do, but, what is usually of greater importance, it tends to prevent the formation of pus, it will cool the region involved to such an extent, even if the trouble be deep-seated, as proven by Winternitz, Esmarch and others, that the growth of bacteria is retarded, if not entirely checked.

This relation of bacterial invasion and growth to the majority of acute inflammations is an established fact, and it is further true that such growth is retarded or entirely checked, and that the cardinal symptoms of inflammation, redness, heat, pain and swelling are effectually relieved and even the fever of a systemic infection materially reduced by the proper application of ice-bags. It is the opposite of good treatment to apply warm applications to acutely-inflamed regions, especially when pus-producing germs are suspected to be at work, unless the purpose be to aid in the production of pus, which seldom is the case and never should be, if treatment is started early.

Heat, particularly moist heat, has its place and is of considerable utility when it is a question of aiding Nature to remove inflammatory products and when the acute process is at an end, as, for instance, after crisis



in lobar pneumonia or for the elimination of serous exudates. Cold, on the other hand, is indicated in the majority of acute ailments, but it should be remembered that the selection of the form of cold to apply is of the greatest importance in the physiologic effect produced. A cloth wrung out of cold water and applied to an inflamed area produces at first a certain amount of nervous shock, absorbs heat, contracts the blood vessels and thereby lessens congestion. Removing this cloth, wringing it out from cold water and again replacing it creates a distinct irritation or stimulation of the parts, a process of reaction, an increased blood supply and a dermic stimulation that is frequently undesirable, particularly when the inflammation is caused by bacterial invasion. In all such cases the object should be to apply a form of cold in which the cooling agent is of constant and lasting degree and in which the degree of cold is one that will help to retard or to check bacterial growth, to relieve congestion and pain and at the same time do no injury to the vitality of the parts covered. Uniform currents of cold water, cold air, the use of liquid air, freezing mixtures, etc., have all been tried, but no form of cold is more simple and better suited for the purpose than melting ice, when properly applied.

In order to apply melting ice properly the ice-bag should be one that is provided with a drainage tube, so that the water from the melted ice is constantly drained off, and in which the degree of cold used is constant, thereby utilizing the enormous amount of heat required to liquefy ice, the difference between melting ice and ice-cold water as a heat-absorbing agent being as 80 to 1, measured by calorimeter in centigrade degrees. The importance of drainage in ice-bags, therefore, is evident. Without such provision ice-bags, soon after their application, become more or less filled with water and air, forming a rolling body hard to keep in place, which gives only the effect of cold water—so greatly inferior to that of melting ice. A drain ice-bag filled with crushed ice to such an extent only that its weight can cause no obstruction to the circulation of the parts to be covered is the ideal form of ice application. Such an ice-bag, when water and air are pressed out at the time of applying it, remains collapsed and holds the ice between the walls of the bag by the outer pressure of the air and, furthermore, retains any shape given it till the ice is melted. Thus it can readily be made to fit the head, neck, chest, abdomen or a joint.

Of diseases in which the application of ice-bags is of great importance as an auxiliary remedy the following may be mentioned: Acute meningitis, acute mastoid disease, acute tonsillitis, lobar pneumonia (with marked success), acute pleurisy, acute endocarditis and myocarditis, acute hepatitis, acute gastritis, acute rheumatic arthritis and acute synovitis, acute enterocolitis, acute peritonitis and acute pelvic diseases, acute cystitis, acute appendicitis (of great benefit), hemoptysis, hematuria, typhoid fever (to head and abdomen), scarlet fever (to head), erysipelas (to region involved), neuralgia, headache, etc.

My drain ice-bag and specially designed pneumonia bag now in use at many hospitals are shown in the accompanying illustrations.

SCHISTOSOMA HÆMATOBIUM IN THE CANAL ZONE.

M. EARLE HIGGINS, M.D.
ANCON, PANAMA.

The following cases of infection, with the blood fluke, *Schistosoma hæmatobium* (bilharzia), occurring in routine stool examinations, would indicate that this parasite is not an uncommon one in the Canal Zone, particularly among the negro laborers from Martinique:

CASE 1.—Martinique negro; male. On Isthmus one month (Culebra). Admitted Dec. 2, 1905, with lobar pneumonia.

Stool: Ova of bilharzia and uncinaria.

Blood: On admission this was negative for malaria; nine days after crisis leucocytes were 9,500; hemoglobin, 40 per cent.

Urine: During the height of fever there was a slight trace of albumin, with a few hyaline and granular casts. Albumin and casts disappeared before discharge. Sedimented specimens showed no blood or ova.

There were no bladder symptoms.

CASE 2.—Martinique negro; male. On Isthmus one and one-half months (Panama). Admitted Dec. 10, 1905, with malaria and bronchitis.

Stool: Ova of bilharzia and uncinaria; *Tricomonas intestinalis*.

Urine: Negative; sedimented specimens.

No bladder symptoms.

Blood: Ameboid rings; estivo-autumnal parasites; leucocytes, 4,200; hemoglobin, 35 per cent.