

continues to do so still, after the lapse of nearly a month.

I now proceeded to test some of the salts commonly used as disinfectants, with respect to their possession of this power of coagulating albumen. The examination was conducted thus: One part of the salt to be tested was dissolved in one thousand parts of distilled water, and the solution was mixed thoroughly with the fresh white of an egg. The salts examined were iron-alum, sesquichloride of iron, common alum, chloride of zinc and nitrate of lead. Coagulation followed immediately in every instance. In one or two cases the dilution was carried much further—one part of the salt to three or four thousand of water. Here, too, coagulation followed in one or two seconds.

It may be remarked, in passing, that the hæmostatic action of the iron-salts is probably to be attributed in great measure to this faculty of coagulating albumen, exercised upon the serum of the blood.

The attempt to obtain similar results from the sulphites entirely failed. They appeared, indeed, to retard coagulation by other reagents. The coagulating power of sulphurous acid was faint and ill defined.

If we review the evidence now before us, we shall find that it stands thus:—

We start with two assumptions—the first justified by recent research, the second borne out by analogy, viz., that infection results from the transference and development of minute germs; and that these germs contain albuminous matter as a necessary constituent, the coagulation of which terminates their existence. Upon these assumptions we frame our major premise—that “all coagulators of albumen are disinfectants;” and, having arrived at this result by a process of pure reasoning, we proceed to prove its truth by experiments upon the antiseptic, and so upon the disinfectant, properties of a well-known albumen-coagulator. Having thus established our fundamental proposition, we produce experimental proof of our minor premise—that “nearly all the substances to which popular experience has assigned the property of arresting the spread of infectious diseases, where that power is at present unexplained, are coagulators of albumen.” The conclusion then necessarily follows, that these substances are disinfectants; and thus a vindication of their efficiency is furnished in those cases where it has been called in question by chemists on the ground that no sufficient explanation of their action has been offered.

The above conclusion does not apply to sulphurous acid and the sulphites. In their case, we must probably look for some more remote physiological effect upon germinal existence.

Note on the Use of Hydrochloric Acid as an Antiseptic.—It is probable that hydrochloric acid, which shares the properties attributed to nitro-hydrochloric acid in the foregoing remarks, will be found to be a valuable preservative of animal food. A piece of meat, immersed for fifteen minutes in a mixture of one part of the acid to three of water, remained entirely free from putrefactive change after nearly a fortnight, though the action of the acid was not sufficiently powerful to prevent the appearance of a small quantity of mould. The meat was then immersed in a dilute solution of carbonate of soda, and the superficially absorbed acid was thus converted into common salt. This reaction obviously gives hydrochloric acid a great advantage over other antiseptics, which introduce into the food a foreign substance, inimical by its very nature, in most cases, to the process of digestion.—*London Pharm. Journ.*, July 22, 1871, from *The British Med. Jour.*

A CASE OF CÆSAREAN OPERATION, SUCCESSFUL TO MOTHER AND CHILD.

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On the 10th of October, 1869, I was called at night to Margaret Gray, a colored woman of pure race, about thirty years of age, married, five feet high, well formed, in good health, and in her second labor. She had been in labor fifteen hours, and informed me that twelve years previously she had a difficult labor, which lasted for six days. I was unable to learn the cause of the protracted labor, but upon examination the result was shown, in total destruction of the perineum, in contraction of the vagina to a degree which precluded a digital entrance, and by a firm, tense, unyielding membrane of cicatricial tissue, about one inch from the ostium vaginae. Upon more careful exploration, I found an orifice in this cicatricial membrane which admitted a No. 10 bougie; an adhesion of the urethra half an inch from the meatus, which made it impervious, and prevented the introduction of the catheter, and in addition a vesico-vaginal fistula. There was no deformity of the pelvis. The woman stated that immediately following her last labor there had been a constant flow of urine, over which she had no control.

Finding that the mouth of the uterus could not be reached in the usual way, I made a rectal examination and found the head presenting. A cavity between the uterus and the cicatricial curtain closing the vagina at the external third, could be readily felt with the finger in the rectum. To enlarge the orifice in the false vaginal membrane was, in my opinion, the proper course; but wishing a consultation, which could not be obtained until morning, my patient was put under the influence of morphine and left for the night.

On the day following, at 11 o'clock, in consultation, it was agreed to make such enlargement as would permit a digital examination per vaginam. An incision was made through the membrane which easily admitted the index finger into the cavity beyond the obstruction, but the os uteri could not be found by myself, nor by the consulting physician. Under these conditions, the labor having now been in progress for twenty-eight hours without change, it was believed, from the condition of the parts and the contraction of the vagina, that delivery was impossible *per vias naturales*. In consultation, it was decided that the Caesarean section should be performed.

Circumstances prevented my operating until 11 o'clock the next day, at which hour, the labor having not progressed further than the previous day, chloroform was administered and the operation for delivery was made in the following way: By a careful incision through the linea alba, commencing one inch below the umbilicus and ending two inches above the symphysis pubis, the abdominal cavity was exposed. The peritoneum was incised to the same extent as the external wound, and by cautious strokes of the knife the cavity of the uterus was entered through an opening sufficient for the extraction of the fetus. There was no liquor amnii, and the left arm was found presenting directly in the line of incision; the child was removed without difficulty and cried vigorously. The placenta attached to the posterior portion of the fundus was immediately taken away, after the extraction of the child, and the hæmorrhage, which was considerable, forthwith ceased, under the ready and firm contraction of the uterus. The line of incision was brought together by seven deep interrupted sutures passed through the abdominal walls and the peritoneum. Long strips of adhesive plaster were placed between each suture, which still further approximated the deep as well as superficial part of the wound. The dressing was completed by applying a com-

press of carded cotton well saturated with carbolic acid and glycerine (one part of the former to eight of the latter), to the whole length of the wound.

The patient did not show by the pulse the effect of the hæmorrhage incidental to the incisions and the delivery of the fetus and the placenta, so, possibly, there was not more blood lost than is usual in a natural labor. The chloroform acted most kindly, and after complete return to consciousness, a large dose of morphine was given, and several portions left with directions to my old nurse to keep the woman under the influence of the drug until I could again see her. The compress of cotton was left undisturbed, except that there was daily added as much of the carbolic mixture as it would take up, until the sixth day, when it was removed. Union by first intention had taken place to the whole extent of the incision, save half an inch at its lowest part, which readily healed in a few days. Under the moderate influence of morphine and light diet, my patient convalesced without an unfavorable symptom, and had recovered sufficiently to no longer need my services after the twelfth day succeeding the operation. The great success obtained was due to my good fortune in having a competent assistant, who, by placing his hands on either side of the line of incision, with the thumbs extending across the upper parts, kept the intestines well out of the way, and at the same time supported the uterus steadily while the incisions were being made, as well as during the delivery of the uterine contents.

It is now seventeen months since the mother was delivered. She has continued in good health, and attends to the rough duties of a laborer's household. The child is a well-formed, strong, vigorous boy, better grown than most children of his age.

Bibliographical Notices.

Cancer: Its Classification and Remedies.
By J. W. Buent, M.D. Philadelphia:
Published by S. W. Butler, M.D. 1871.
Pp. 191.

In his introduction the author aims at giving such a classification as will remove the difficulty of having so many names for the same form of cancer. At the outset apparently deciding that cancer is a blood disease, he says, later, that the first step in a cancerous formation is "an exudation of