

gation could be easily kept up, if necessary, for an hour or more at a time.

#### USEFUL IN ACUTE SUPPRESSION OF URINE.

It had proved extremely useful in his hands in cases of urinary toxæmia and renal insufficiency, in which the symptoms showed uræmic eclampsia to be imminent. He knew of no method equal to irrigation of the bowel with water at a temperature of 115 deg. to 120 deg. F. In one case the patient had not passed water for thirty-six hours. Fifteen gallons of water at a temperature of 120 deg. F. were used by continuous irrigation. This excited the action of the skin, the bowel, and kidneys, and the woman recovered.

#### SUPERIOR TO SALINE INFUSION.

In case of collapse from hemorrhage this irrigation treatment seemed to him superior to either infusion or injections under the skin. In case of ectopic gestation in which rupture had occurred, he had been able to save several patients by employing continuous hot irrigation during the operation.

#### NON-SALINE INJECTIONS ARE FATAL.

Dr. R. H. M. Dawbarn said that, although many patients still died from shock after major operations, little progress had been made in the treatment of this condition, and but little space was devoted to its consideration, even in the latest text books; yet it was only along the line of prevention that we could hope to do much. In 1890, having lost a member of his family from shock after an operation, he had devoted a good deal of time to laboratory experiments on shock and its treatment by hot saline infusion. He was pleased to find that Dr. Kemp's experiments had so completely confirmed his own regarding the stimulation of the heart produced by water of a temperature of 115 deg. to 120 deg. F. It was during these experiments on animals that he had learned accidentally that plain water, without salt, would almost immediately kill an animal by destroying the blood corpuscles. It was for this reason that solution should be used.

#### OUR EFFORT SHOULD BE TO PREVENT SHOCK.

Since 1891, in every severe operation in which shock was to be expected, while the

patient was still under the anæsthetic, he had practised infusion of one or two litres of hot saline solution. He felt positive that in this way he had many times prevented shock. If later on there seemed to be an indication for further saline infusion, instead of reopening the vein he resorted to Dr. Kemp's method of continuous irrigation. The results had been most satisfactory. The method also had the advantage of restoring or maintaining the animal heat.

Dr. Ramon Guiteras said that in many diseased conditions of the rectum hot irrigations by the double-current tube were exceedingly beneficial. The method was of most service in case of abscess, ulcer, and various tuberculous and syphilitic lesions. Plain water alone would sometimes produce an unpleasant dry condition of the rectum, and in these cases it was desirable to use saline solutions or weak flaxseed tea. In the male these hot irrigations were chiefly useful in seminal vesiculitis, acute prostatitis. By diagrams, taken from frozen sections, the speaker showed that with a Kemp tube it was possible to direct the current of hot water upon the seminal vesicles.

Dr. A. M. Phelps said that ulceration of the rectum and colon demanded treatment by continuous irrigation, together with the performance of inguinal colotomy. This had been his recent practice.

### THE MICROSCOPE AS A DETECTIVE

Some years ago a box containing a large amount of specie was forwarded by railroad, in Prussia, to a banking house at Berlin. On arriving at its destination the box was found to have been opened and emptied of its treasure, for which the thief had substituted sand. The police were on the alert, their first aim being to discover at which of the stations the sand had been inserted—no easy matter, considering that the whole line of road ran through a sandy country. Nevertheless, some sharp person suggested that the sand of one district might be of a different character from that of another. The hint was acted upon. Samples of sand were