disease. We rather expect to see a certain amount of edema behind the ear, and perhaps fluctuation.

Fortunately for our patients, we are to-day enabled to detect the presence of extension to the mastoid long before it has reached this stage. Every patient who has an acute suppuration of the middle ear should be carefully examined for evidences of mastoid involvement, as symptoms may appear as early as the second day. It is a well-known clinical fact that the absence of temperature is no guide whatever; during the acute process in the middle ear we are apt to have some elevation, but this may entirely subside with free discharge from the ear, even although the mastoid be filled with pus.

Tenderness over the mastoid antrum is apt to be a better guide, but it must be remembered that this is often apparent only on deep pressure, and also that with some very thick bones we are not able to elicit tenderness.

In the absence of these two symptoms we are obliged to turn to an inspection of the condition of the middle ear. With an increasing collection of pus in the mastoid there will be a more pronounced bulging of the drum, and in many cases which give no evidence externally there will be almost a complete closure of the auditory canal from swelling of the wall nearest the mastoid. There is usually much pain with this condition, but in some cases, and especially with phthisical patients, there is none. The presence of this increased swelling of the drum and posterior canal wall is diagnostic of mastoid trouble, however, and it should not be allowed to persist long without operation.

Now as to the treatment which should be instituted once we have made the diagnosis. We must bear in mind the fact that mastoiditis is always secondary to a purulent inflammation of the middle ear, and use our best efforts to abort this trouble. Free drainage should be maintained through the drum, and at the first suspicion of tenderness or other sign of mastoid involvement we should apply cold by means of Leiter's coil. At this stage leeches to the mastoid are often of value, and the patient should, of course, be kept in bed. Active treatment should at the same time be continued for the suppuration in the middle ear, as we have just indicated. If the pain and tenderness of the mastoid persist for more than twenty-four hours after free paracentesis and the use of the cold, it would be advisable for most practitioners to consult with some one skilled in such matters, as there is very great danger in delaying operation too long. No one can tell in which direction the pus will turn to seek relief, and practically the only notice we have of its penetration inwards to the lateral sinus or brain is a sharp chill, ushering in a condition of septicemia, and then it may be too late to interfere.

Carried out in competent hands the mastoid operation is devoid of danger, and in uncomplicated cases the patients recover so rapidly that it is often advisable rather than submit to the tedious processes of spontaneous recovery, which may take many weeks, and which gives us no assurance that the patient may not ultimately be obliged to submit to operation after weeks of delay.

Prescribing by Druggists.—The Paris "Syndicat des Medecins" sued a pharmacist for illegal practice of medicine because he had made an analysis of the urine of an applicant and then prescribed for him on the ground of what he found in the urine. The court decided that pharmacists are not competent to draw conclusions from examination of the urine so as to prescribe understandingly, and consequently condemned the defendant to a fine of \$10 and a similar sum to be paid to the syndicate.

AN IMPROVED METHOD OF EXAMINING THE FEMALE BLADDER.

J. CLARENCE WEBSTER, M.D.

Professor of Obstetrics and Gynecology, Rush Medical College, the University of Chicago.
CHICAGO.

In his earlier papers describing his method of examining the female bladder, Dr. Howard Kelly recommended that the necessary elevation of the pelvis be obtained by placing pillows under the hips as the patient lay on a flat table in the lithotomy position. More re-

Fig. 1.—Boldt table representing the elevation used in examining the female bladder. The author's shoulder support is shown, attached to the table-top. The leg-holders are also in position.

cently he has advocated the genupectoral posture as more advantageous.

Each of these methods has certain disadvantages. When the first posture is adopted, the examination is frequently unsatisfactory. The elevation necessarily leads to a flexing of the upper part of the abdomen on itself. This interferes with the free descent of the intestines toward the diaphragm, which is necessary to the complete distension of the bladder with air. The hips can not be raised much above twelve or fourteen inches without discomfort to the patient if she be not anesthetized, and if an anesthetic be employed, the cramping of the abdomen interferes with free respiration. In women with tense or fat abdominal walls, it is often impossible to obtain distension of the bladder by this method.

The genupectoral posture, while undoubtedly most

favorable to bladder distension, is very unpleasant to the patient if she be not anesthetized, while if an anesthetic is used, its administration is very awkwardly carried out. The patient's neck is apt to get much bent, and if she vomits or secretes mucus freely there is often trouble in managing these complications satisfactorily. Moreover, the position of the examiner is not apt to be at all a comfortable one, especially in catheterizing the ureters.

During the past three years the writer has employed a method which is free from these objections. The patient is placed on a Boldt operating table in the lithotomy position, the ankles being fastened to upright rods, the buttocks projecting slightly over the end of the table resting on a rubber pad. A steel bar with two padded supports is attached to the top of the table so as to support the shoulders. After the external genitals and vagina are cleansed, the patient is enveloped in sterile sheets, the urine is withdrawn from the bladder, the

This posture has all the advantages of the genupectoral position and none of its disadvantages. In difficult cases in which distension of the bladder has not been thoroughly satisfactory I have not been able to get better results by trying the genupectoral position. This method is also advantageous in the cases in which examination of the bladder or catheterization of the ureters is to be followed by operation. The table is merely lowered and the procedure at once begun if the vaginal route is to be chosen.

In the examination of the rectum also, the position is highly satisfactory, air distension being obtained in the great majority of cases as soon as the anus is opened. The various forms of rectal specula may be used with great ease. I have also found it serviceable for certain obstetric maneuvers for which the genupectoral position has hitherto been employed.

THE DIFFERENTIAL DIAGNOSIS OF TYPHOID FEVER.*

WILLSON O. BRIDGES, M.D.

Professor of Medicine, University of Nebraska College of Medicine.
OMAHA, NEB.

The combined group of symptoms which establishes the diagnosis of typhoid fever are: a gradually increasing fever with evening exacerbation and morning remission; general malaise with headache; a furred tongue with red edges and tip; nose bleed; a relatively slow pulse (possibly dicrotic); abdominal distension with tympany, gurgling and tenderness in the right iliac fossa on firm pressure; a roseolar eruption confined principally to the abdomen and chest; enlarged spleen, and the physical signs of bronchial catarrh.

Should every case of typhoid fever present the foregoing symptoms, the diagnosis would be simple and mistakes would not be common, but unfortunately this is not true and I believe the classical history, as portrayed in the books, is the exception rather than the rule. Because of the great variability in the symptoms and the tardiness of the appearance of many of them, the diagnosis is often not clear until the patient is far advanced in his illness. We have to wait a week from the commencement of the attack to demonstrate the characteristic fever chart, seven to ten days to find the rose spots, usually the same time to demonstrate an enlarged spleen; during this period what an anxious time the attending physician has in satisfying the family and friends that he is positive as to the nature of the trouble. Too often he starts off with la grippe, which does not respond in a few days to treatment, but turns out to be a malarial fever which later becomes complicated by typhoid at the first sign of an intestinal hemorrhage or a perforation.

Probably typhoid fever can be made to answer for a greater number of affections than any other disease. The only consolation the physician can find in his unfortunate position frequently is, that he is not the only one to be similarly situated; in fact, he is not even an exception, for we have all been there and will be again. The eminent men who were in attendance upon the Czar of Russia a year ago had him down with la grippe for nearly a week before typhoid fever showed up.

In quite a number of cases, the preponderance of some symptom leads away from the suspicion of the disease, and accounts for many errors in diagnosis. I have seen the physical signs of bronchitis so intense in the early

Fig. 2.—Method of examining the female bladder on the Boldt table.

urethra is dilated to the necessary size and a speculum containing its obturator introduced into the urethra. By means of a crank the top of the table is turned on a transverse axis so that the lower end is elevated and the upper end depressed. The patient is thus made to rest on an inclined plane, being held by the shoulder supports, her trunk being flat against the table and not bent in any way, so that her respiration is free and the anesthetic easily administered. The writer usually raises the table-top until its lower end is twenty-three inches above the normal level. The obturator is then removed from the speculum, allowing air to enter and dilate the bladder. The examination of the bladder and ureters is then carried out, the examiner standing on a stool so that the eyes may be well above the outer end of the speculum.

* Read before the Botna Valley Medical Society, at Avoca, Iowa, Feb. 13, 1902.