

he has made the diagnosis of mitral stenosis by the bronchoscope. Kovacs and Stoerck (*Wien. klin. Wchnschr.*, 1910, xxiii, No. 42, abstr., *München. med. Wchnschr.*, 1910, lvii, 2314) have described compression, thinning of the anterior wall and dislocation of the esophagus due to pressure of the enlarged left auricle.

E. DAVID FRIEDMAN, M.D., New York.

#### Bureau of Mines and the First Aid Movement

*To the Editor:*—In connection with the propaganda for the spread of the first aid movement, which is now being fathered by a committee of which Dr. Joseph C. Bloodgood of Baltimore is the chairman, practically no credit has been given to the most active agent in this field—the United States Bureau of Mines.

For a number of years the Bureau of Mines has had specially trained groups of men living in cars equipped to fight mine fires and other mine catastrophes stationed at strategic points throughout this country. From time to time these cars travel to all the mining districts, and when not engaged in fighting fires, give instruction in first aid to the injured and in the use of the different forms of breathing apparatus to be worn in case of mine fires.

After thoroughly training many different groups in a state it is the custom of the Bureau of Mines to hold a contest in which these different teams participate. For the past three years the teams winning these state contests have participated in a national first aid meet at which suitable prizes are given. Last year at the annual nation-wide contest held by the Bureau of Mines at San Francisco, teams came from practically every mining state in the Union and from Alaska as well. So widespread has this movement become in the mining world that, almost without a single exception, every up to date mining company is devoting much time to training their men in this line. This spirit has become generalized only through the teaching of the Bureau of Mines. We are of the opinion that in less than ten years hence every underground worker in the United States will be compelled to become proficient in the handling of injured men.

I have been connected with mining hospitals for some time, and never having belonged to the Bureau of Mines, am offering this testimony to show, from the standpoint of a mining surgeon, what a potent factor in the first aid movement the U. S. Bureau of Mines has been from the earliest days of this movement.

F. E. CLOUGH, M.D., Lead, S. D.

#### History of Medical Education in the United States

*To the Editor:*—In THE JOURNAL, Feb. 5, 1916, appears a copy of an interesting letter written in 1878 by Dr. John A. Wyeth to Dr. J. Marion Sims, containing a proposition to establish a high grade medical school in New York City. This letter has called to mind a somewhat similar proposition discussed in the Medical Society of the State of Pennsylvania in the year 1884 (*Transactions*, p. 33). The resolution which opened the discussion at that time was as follows:

*Whereas*, The present demands for higher education in medicine require colleges to adopt a preliminary examination, and a three years' graded course, and to separate the examining board from the teaching faculty, therefore,

*Resolved*, That the Nominating Committee report, in addition to the usual officers, the names of seven members or delegates, not more than three of whom shall be from Philadelphia, who shall be called the Committee on Medical Education.

*Resolved*, That this Committee shall be directed and given authority to obtain before the next annual meeting of the society a charter for a college situated in Allegheny or Philadelphia County to be called "The Medical College of the State of Pennsylvania."

*Resolved*, That the charter of said college shall embody the points referred to in the above preamble, namely, a preliminary examination, a three years' graded course, and an examining board appointed by this society who shall examine all pupils and applicants for the degree of doctor of medicine, and the said charter shall prohibit the teachers acting as examiners.

Provided, however, that if, before the beginning of the session of 1884-85, all the undergraduate medical schools in the state adopt a preliminary examination, a three years' graded course, and an examining board, wholly or in part separate from the teaching faculty, then the

committee shall take no steps to secure such charter; but shall report at the next meeting of the society the above facts.

After considerable discussion the whole matter was laid on the table.

Such records of the movement to improve medical education in the United States are a rather instructive exhibit of the defects in medical education thirty-five or forty years ago. Historically these have possibly a value which the Association journal may care to have recorded in its columns.

JOHN B. ROBERTS, M.D., Philadelphia.

### Queries and Minor Notes

ANONYMOUS COMMUNICATIONS and queries on postal cards will not be noticed. Every letter must contain the writer's name and address, but these will be omitted, on request.

#### THE NUMBER OF COLON BACILLI IN WATER AND IN MILK

*To the Editor:*—1. What is the Phelps method of enumerating colon bacilli in water?

2. What is the approved method for ascertaining the number per cubic centimeter of colon bacilli in milk?

W. W. WATKINS, M.D., Phoenix, Ariz.

ANSWER.—1. Phelps' method for calculating the numbers of bacteria is based on the following principle: If a series of cultures, made from appropriate dilutions, yield some positive and some negative results, the most probable value of the actual number of organisms present is indicated by the reciprocal of the greatest dilution giving a positive result. For example, if dilutions of 0.1, 0.01 and 0.001 c.c. give positive results for the first two, and negative for the last, then the most probable number of bacteria present is 100. To apply this method to the enumeration of *B. coli*, the dilutions are inoculated into litmus-lactose-broth in fermentation tubes, or plated in litmus-lactose-agar. Subcultivation is done in the usual way for specific determination. (*Am. Jour. Pub. Hyg.*, 1908, xviii, 141).

2. Milk is carefully sampled, if possible kept in the original receptacle, and cooled below 40 C. (104 F.), but not frozen, until examined. It is thoroughly well shaken before diluting, the customary precautions being employed. Dilutions (with sterilized drinking water) of 0.1, 0.01, etc., are made, each dilution being shaken vigorously to break up clumps. One c.c. of each dilution is measured into a sterile Petri dish (preferably with porous earthenware cover), litmus-lactose-agar is poured as usual, and incubation is done at 37 C. (98.6 F.) for forty-eight hours or five days at 21 C. (69.8 F.). The red colonies are counted, and subcultivation is done for specific determination.

We may refer also to the following publications of the American Public Health Association:

"Standard Methods for the Bacterial Examination of Milk."

"Standard Methods for the Bacterial Examination of Water."

#### TREATMENT OF "AFTER-PAINS"

*To the Editor:*—In women who have borne several children and whose muscles seem to be quite lax, I give 15 c.c. of ergot every six hours for three doses, then a quarter grain of morphin once or twice if necessary, to check severe after-pains. I use the Credé method immediately after delivery and after the placenta passes. This treatment is followed principally in cases of patients having had several days and nights of distressing after-pains. May I have the treatment discussed? Please tell me whether or not the morphin increases the liability to infection.

B. C. FAUST, M.D., Deary, Idaho.

ANSWER:—The Credé expression generally is understood to mean expression of the placenta from the uterus. The term cannot properly be applied to massage of the uterus after the placenta passes. Numerous authorities recommend abdominal massage not only immediately after delivery of the placenta but also continued for two or three days for the prevention and treatment of after-pains. This measure is probably of value. Ergot has also been recommended for the prevention of after-pains, but in smaller doses than those mentioned above. Ordinarily from 3 to 5 c.c. are given every three to six hours, the administration being continued sometimes for three to four days. The suggestion to use a limited number of larger doses is not unreasonable. Morphine or some similar narcotic or sedative is also recommended by most authors. There is little, if any, reason to think that morphine so used increases the liability to infection. Its tendency to produce constipation should be overcome by appropriate laxatives.