

would be rather seriously perturbed to find that the speed was not the same everywhere.

Dr. Stromberg's method depends on the fact that when one observes a star he does not point the telescope directly at it but has to make a slight allowance for the 18-mile-a-second motion of the earth. To receive the light beam from the nebula straight along the axis of the telescope, the telescope has to be tilted through a small angle corresponding to the ratio of the velocity of the earth to the velocity of light. As the light passes along the telescope the latter is moved forward on account of the motion of the earth and hence the point where the beam of light strikes the photographic plate depends on the motion of the telescope.

If the velocity of light from a nebula differs from that from a neighboring star the nebula would appear shifted a small amount in the course of the year as the observer's own motion varied.

Dr. Stromberg's measurements at the Mount Wilson Observatory show that the velocities are alike within one-tenth of one per cent., which is less than the error involved in the experiment.

Science News Letter, June 20, 1931

MEDICINE

Peptic Ulcer Patients Are High-Strung

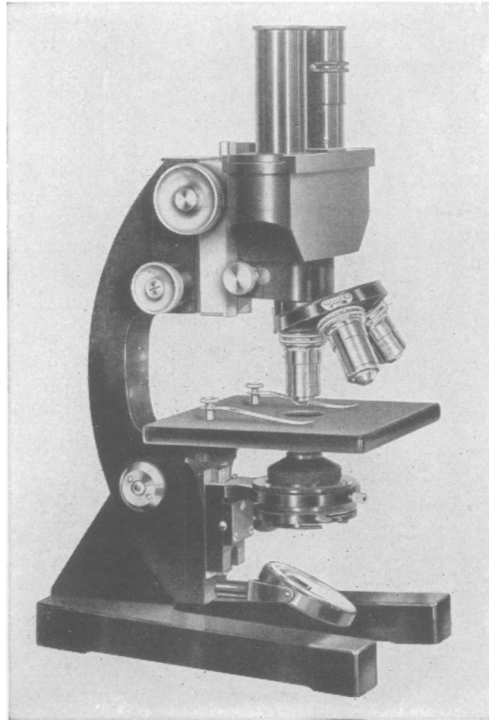
TEMPERAMENT as a large factor in ulcer of the stomach was discussed by Dr. Witten B. Russ of San Antonio, at the meeting of the American Medical Association at Philadelphia.

"Peptic ulcer patients are born and not made," Dr. Russ declared.

Patients who suffer from this condition are always a distinct type with high-strung, sensitive nervous systems, emotional temperaments and certain physical peculiarities.

The origin and behavior of chronic peptic ulcer are still largely mysterious, but experience and common sense show that they are in some way connected with the patient's nervous organization and physical make-up, Dr. Russ said.

Results of treatment of this disease show clearly the close relationship between it and the nervous system, Dr. Russ observed. He cited the frequently met case of a patient with peptic ulcer who gets no relief from different kinds of treatment, but recovers suddenly and completely, as if by magic, when something occurs to make him happy. Such occurrences may be a change of resi-



The Added Touch

GSE, the new B & L Laboratory microscope, embodies fea-

tures that make it finer than the average instrument. Its handsome design gives it graceful lines—a design which suggests and accentuates its increased stability and balance. It is a laboratory microscope with the weight and rigidity of a research instrument, yet its price remains well within the range of laboratory models.

The GSE is a binocular microscope, thus affording the users relief from eyestrain. The eyepieces can be manipulated so as to give a decided stereoscopic effect. The binocular body is removable for the substitution of a monocular tube when the instrument is to be used for photography, projection or drawing.

This model is an instrument of historic associations, for its design is a direct evolution and refinement of a stand developed by Bausch & Lomb in the early days of microscopy.

Write for descriptive literature.

BAUSCH & LOMB OPTICAL CO.

644 St. Paul Street

Rochester, N. Y.



BAUSCH & LOMB

MAKERS OF ORTHOGON EYEGLASS LENSES FOR BETTER VISION

dence or occupation that brings happiness and contentment.

In clinics in the South and West, where patients came from small towns and rural communities, treatment is followed by better results than in large clinics in New York City, Dr. Russ pointed out. He explained this on the ground that the city patients are strikingly alike in their physical and emotional make-up. It is these factors and the environment in which they live that predisposes them to chronic peptic ulcer and is responsible for the poor results of treatment, he thought.

Science News Letter, June 20, 1931

MEDICINE

Man Lived 38 Years With Broken Spine

A MAN who lived for 38 years after having had his spine broken has just been reported by Douglas Green, a physician of Sheffield, England, to the *Lancet*, British Medical journal. Two years is generally considered the longest a person can be expected to live after such an injury, Mr. Green pointed out.

The patient was a telephone linesman who fell from a high telephone pole and broke his spine in 1892, when he was 21 years old. After a stay in the hospital, he was sent home and continued to live until he died of kidney trouble, just after his sixtieth birthday this year. Both legs and the lower abdominal muscles were paralyzed as a result of the injury and the patient had been forced to live in a spinal carriage.

Science News Letter, June 20, 1931

PSYCHOLOGY

Food is Used as Lure To Train the Feeble-minded

FOOD may be the way to a man's heart but it is also the best incentive for training children whose mental processes are below par, it appears from studies by Cecilia G. Aldrich of the Vineland, N. J., Training School. Miss Aldrich reported to the meeting of the American Association for the Study of the Feeble-minded the progress of her studies on the trainability of those mentally deficient children who fall into the idiot classification.

Lowest in Scale

These children come lowest in the scale of mental development, having mental ages of from one and one-half to about three years. Miss Aldrich believes that these children may be taught to contribute to the upkeep of the institutions that house them, instead of being completely dependent burdens. With this view she proceeded to investigate methods that might be used in training these children, and the extent to which they could be trained.

The problem-solving ability was tested along lines similar to those used in experiments with apes. The child was placed alone in a room with a lure hanging overhead out of his reach. Boxes were in the room which he could pile up and stand upon to get the lure. His method of approaching the prob-

lem, as well as his success were observed by the investigator who was concealed outside the room.

When the lure was a banana, the children showed more initiative and were more successful than when the lure was a ball. Addition of a cookie to the ball increased the initiative and degree of success somewhat.

The experiment also revealed personality differences of importance, Miss Aldrich found. Some of the children made no attempt to solve the problem until the investigator was out of the room and they were alone. Others whimpered and cried when left alone and made no progress until the investigator returned. Then their progress depended on her encouragement.

Science News Letter, June 20, 1931

MEDICINE

Multiple Sclerosis Treatment By Electricity Is Hopeful

REMARKABLE results from high frequency electric currents in the treatment of the hopeless condition known as multiple sclerosis, or creeping paralysis, were described by Dr. William H. Schmidt of Jefferson Medical College at the meeting of the American Physical Therapy Association in Philadelphia. Dr. Schmidt and his associate, Dr. Benjamin Weiss of Jefferson Medical College, said they could not call their method a cure for creeping paralysis, but they are very hopeful. Every case treated has improved and some have recovered completely.

This disabling disease, for which no cure has yet been found, is characterized by remissions of symptoms, and Dr. Schmidt said they could not be sure whether their patients had really recovered or were only having natural remissions. An encouraging feature is that the improvement has continued after the treatment has been stopped. The treatment, which is the same that has been successful in treating cases of paresis, produces a high fever in the patient. The theory is that this fever stimulates the natural defensive mechanism of the body to overcome the disease, Dr. Schmidt said.

Science News Letter, June 20, 1931

CONVENIENCE COUPON

for New or Renewal Subscription to Science News Letter

Send this coupon to Washington while you are thinking of it.

Science News Letter.

21st and Constitution Avenue,
Washington, D. C.

Please start renew my subscription to SCIENCE NEWS LETTER. I am enclosing remittance as checked below:

- 2 years, \$7
 1 year, \$5

Name _____

Street Address _____

City and State _____

If this subscription is a renewal, check here