QUOTATIONS FRONT PAGE SCIENCE¹

"BLACK RAYS" OF SUN JOLT THEORY OF GRAVITATION

MINNEAPOLIS ENGINEER'S DISCOVERY OF PUSHING, NOT PULLING, FORCE PUZZLES SCIENTISTS

Special Telegram to Public Ledger

MINNEAPOLIS, July 19.—H. J. Smith, an engineer, has physicists here in a quandary and admitting there may be a joker in the Newton theory regarding the forces that keep the earth in its orbit. The quandary is the result of positive demonstrations with what Mr. Smith has termed the hitherto undiscovered "black rays" of the sun.

Science has held that the sun exerts a pulling power on the earth and that this, with centrifugal force, has kept terra firma in its place. Smith set up a delicately constructed weighing instrument with a dial and pointer. The pointer indicated the full rays of the sun seemed to exert a pushing instead of a pulling effect.

Smith called in Dr. Henry A. Erikson, head of the physics department, University of Minnesota, and other scientists, and they could hardly believe their eyes as they saw the mysterious force exert a greater pushing power than ever.

Dr. Erikson at once canceled plans for a vacation and to-day was locked up in his laboratory constructing one of the Smith "attractometers" for a series of experiments. He refuses to give out a statement, but admitted frankly that he can not explain what he has seen and that, if the sun actually is exerting a pushing force on the earth, science has its work cut out to form a theory to take the place of or to at least supplement the Newtonian theory of gravitation.

DEVIL'S GRIP GERM BELIEVED DETECTED

PHILADELPHIA DOCTOR DECLARES MALARIA-LIKE PARA-SITE IS CARRIED BY MOSQUITOES

QUININE BEST REMEDY YET

DR. JAMES C. SMALL, bacteriologist of the Philadelphia General Hospital, has found what he believes to be the cause of Devil's grip, a disease similar to malaria.

The finding can not be affirmed definitely until more patients suffering with the disease are examined.

Devil's grip, Dr. Small explained, has nothing to do with influenza or la grippe. It is a contagious disease, which causes victims much pain in the chest and the lower ribs. Last year there was an epidemic of the fever in Philadelphia and examinations by Dr. Small disclosed that in each of the cases there were

¹ From the Philadelphia Public Ledger of July 20.

parasites in the blood. These parasites may be caused by mosquito bites or bites of other insects, Dr. Small said.

Parasites are a low form of life which burrow their way into the red blood corpuscles. As one of them grows larger it destroys the corpuscles and other parasites are created.

In his examination of blood specimens of persons affected by the disease, Dr. Small found the parasites were not frequent in the system.

Under a microscope he examined thousands of red blood corpuscles and found parasites in only a few instances.

The disease is not fatal, but causes the victim a great deal of pain for a week or more. The pains first develop in the chest and come on very suddenly. The patient has a high fever for a day. The pains and fever will subside in most cases and then return in four days. Headaches occur constantly and backaches occasionally.

Dr. Small said it had been found that quinine is the best remedy for the pains and fever.

The only case reported this summer was in Huntington, Va., the physician said. An epidemic may occur in Philadelphia later in the summer, he said, but aside from possibility of proving his preliminary findings, he does not feel any great progress can be made toward stopping the disease.

No reason has been found for the pains entering in the region of the chest. The entire blood system is affected, he explained, and for that reason it is strange the pain should be local. X-ray examination of the lungs and chest show no abnormal condition.

SCIENTIFIC BOOKS

Einführung in Die Allgemeine Kohlenpetrographie. By ROBERT POTONIÉ. Gebruder Borntraeger, Berlin, 1924.

THE present volume will excite probably some surprise among mineralogists and petrographers, since it is written from the botanical standpoint. It marks, however, a tendency which is growing at the present time. The actual study of coal shows that it is a botanical product, and as such can naturally be best treated from the botanical standpoint. The geologists and chemists have in the past not been able to throw a great deal of light on the subject of coal and the present author emphasizes the importance of the botanical viewpoint. He is the son of the late Henry Potonié, who is well known as the author of many and important contributions to the study of coal. The book is distinguished by the large amount of attention which is given to the actual structure of coal, a subject which has been, for obvious reasons, much neglected in the past. The investigations carried on in America have largely obliterated our previous igno-