

## MEDICINE

## Finds Men Better Than Women As Blood Donors

**M**EN CAN give blood for lifesaving transfusion more easily than women. Drs. Harold W. Jones, Herbert Widing and Lyle Nelson of Philadelphia have just reported to the American Medical Association.

The best type of donor is a man between 20 and 40 years of age, weighing 150 pounds or more, and of erect, compact stature, they found. A fat donor does not stand loss of blood as well as the robust, wiry type.

Dr. Jones and his associates made a detailed study of 50 donors who gave blood in 175 transfusions, to determine the effect on the donors' health of repeated losses of blood.

Donors lost from one-half to one pound in weight immediately following the transfusion. However, all but two of the men who gave blood more than once subsequently gained in weight, the gain varying from one to 13 pounds. Many of the donors found their general health improved and felt more able and eager to attend to their usual duties. Thirty of the fifty donors weighed more than 160 pounds.

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## PHYSICS

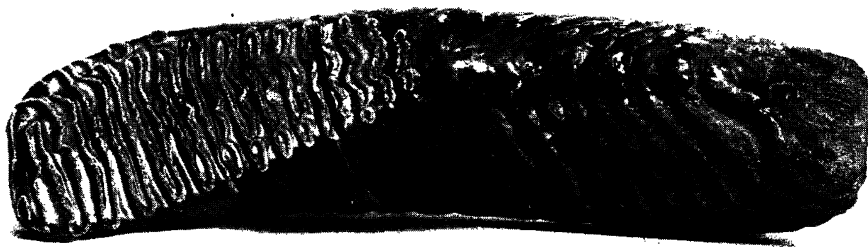
## Rare Element Gives New Kind of Light

**R**ODS of quartz heated in the Bunsen burner have been made to send out a new kind of light, the meeting in Washington of the National Academy of Sciences was told this week.

The quartz, in which a compound of the rare metal neodymium had been dissolved, was prepared by Prof. R. W. Wood of the Johns Hopkins University. When heated the rods give a light whose rainbow or spectrum does not include all the colors but is crossed by dark bands.

A white-hot, incandescent wire, like those of tungsten used in the electric lamp, gives white light in which none of the possible colors is missing. The neodymium, however, has the unique property of sending out only special vibrations of its own. Light passed through cold neodymium or other rare earth compounds has these same colors removed from it. Only rare earth elements show this peculiar behavior.

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A PREHISTORIC ELEPHANT'S TOOTH WITH ITS ENAMEL FOLDS

## ANTHROPOLOGY

## Age of Prehistoric Man Measured by Elephant Teeth

**N**EW ACCURACY in the dating of the time any individual prehistoric man lived can be attained if the teeth of an extinct elephant species can be found buried with or near his remains. At the meeting of the American Philosophical Society in Philadelphia last week, Prof. Henry Fairfield Osborn, president of the American Museum of Natural History, told of a method he has developed for getting recent geological dates by means of measuring the length of the complex enamel folds in elephants' teeth.

The new method of enamel-measuring, which Prof. Osborn calls "gano-metric," arose as the result of studies on the much-debated question of the ages of the Ape-Man of Trinil, Java, and the Dawn Man of Piltdown, England. In this work he had as associates Prof. W. C. Dietrich of Berlin and Prof. Wilhelm Freudenberg of Heidelberg. Teeth of two species of extinct elephants found associated with these two famous skulls indicated by their comparative degrees of development an unexpected reversal of their relative ages. The elephant teeth found near the more highly developed Piltdown skull were of a more primitive type, with fewer inches of enamel foldings, than were the teeth found near the site of the famous Trinil skull in Java. Prof. Osborn therefore concludes that the Piltdown skull is much the older, and that the very primitive character of the Trinil skull is to be accounted for as a survival of a lower type in a tropical country where life was easy.

After the work on the two skulls was concluded, Prof. Osborn devoted con-

siderable time to an intensive study of a large collection of fossil elephant teeth, and found that there is a direct relation between the footage of enamel foldings and the geologic age of the specimen. Elephants that the Piltdown man knew had teeth with about a yard of enamel foldings packed into their surfaces, while the elephants that Crô-Magnon hunters slew had about six yards of enamel foldings per tooth.

Prof. Osborn believes that the rate of enamel development in a given evolutionary line in elephants was uniform, so that eventually it may become possible to get a quite accurate estimate of the age of a specimen simply by measuring the number of inches of these foldings.

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## PUBLIC HEALTH

## Frequent Revolutions Chief Cause of Poor Health

**R**EVOLUTIONS and political disturbances are the chief causes of the poor health conditions in Latin American countries today, declared Dr. C. E. Paz Soldan, professor of hygiene at the University of San Marcos, Lima, Peru, at the Pan-American Conference of directors of health in Washington.

"When revolution occurs, the health officer is knocked out or fired," Dr. Soldan said. A new health officer is appointed and the public health work must begin all over again. This makes it impossible to have any continuous program of even the most elemental public health work as we understand it in the United States.

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