

the Bureau's entire roster of activities. Fundamental research is being carried on there, 365 days a year. Two Bureau scientists were the men who worked out the details of what a blind landing system for airplanes must do, for example—and incidentally, devised many of the devices that will soon be used with such systems. Other scientists have added materially to the chemist's knowledge of textile fibers.

The list of Bureau research achievements is long and brilliant. And the Bureau is still the keeper of standard weights and measures for the United States of America; it has not forgotten one of the primary purposes for which it was established by act of Congress in 1901.

*Science News Letter, September 10, 1938*

For the third time, Ossetian people of the Central Caucasus have acquired a new alphabet: they used an Arabic alphabet before the revolution, then the Latin, and now have one based on the Russian.

#### PSYCHIATRY

## Mind of Society Needs To Call in the Doctor

SCIENTISTS recognize the right of society to be protected from those who prey upon their fellows. Criminals should be segregated where they cannot do harm. But prison incarceration as a cure for the habitual criminal is not supported by scientific research.

For the normal child, punishment may have its value in the educative process. But for the child with warped personality, beatings from the parent are often succeeded by a succession of equally futile repressive measures in reform school, jail and penitentiary. What he needs is straightening out.

America's estimated \$13,000,000,000 crime toll is the penalty paid by the community for harboring a small minority of untreated, chronically crooked personalities, declares Dr. Raymond B. Cattell, British psychologist, who was formerly psychotherapist in the School Psychological Clinic of Leicester.

"Whether it is the obsessional petty thief who works such havoc in the big 'chain' stores or criminals of world notoriety like Kürten, the Düsseldorf mass murderer, who had murdered two of his school-fellows by the age of eight,



#### LIGHTS THAT MUST FAIL

*The Bureau tests Uncle Sam's electric light bulbs by checking a random selection from the many hundreds of thousands of bulbs bought to light Federal offices throughout the country. If they do not meet specifications set by Bureau scientists, back they go to the manufacturer.*

#### INVENTION

## New Type Traffic Light Changes Colors Gradually

A NEW TYPE of traffic light, with colors that fade gradually from one to the other instead of changing abruptly as in the familiar street standard, has been placed on exhibition at the New York Museum of Science and Industry.

Invented by 72-year-old Martinus Sieveking, a former concert pianist turned inventor, the new light is stated to be cheaper to construct than the more conventional signal. In addition, its inventor claims, its gradual change feature gives pedestrians and motorists a better warning of a change, enabling automobiles to stop gradually and pedestrians to know when traffic is about to move against them.

Mr. Sieveking estimates the cost of his lamp as but \$25 as against the \$200 cost for the average type of light. The device is of the rotary type, consisting of an outer metal shell with four windows. Inside the shell a glass drum, divided into eight sections of green, amber and red, continuously revolves, the colors dissolving smoothly into one another slowly and progressively. About 10 seconds are required to make the complete change from one color to another, although the mechanism may be set to afford longer intervals if desired.

we clearly have to deal with a rooted abnormality of character which began in childhood and should have been treated in childhood," Dr. Cattell writes in *Crooked Personalities in Childhood and After*.

Mass hysteria, which has afflicted society as a whole from the days of the Crusades through epidemics of dancing mania, witch-hunts, and stock exchange excitement, demands medical treatment.

"Today Europe groans under a nightmare emotion of war fever and suspicion; and no one knows how to alleviate the vicious psychological circle of fear and aggression," writes Dr. Cattell.

Children need understanding and mental care during the formative years. Aid is needed again when the individual reaches the difficulties of adult life and marriage adjustment. Perhaps even more is psychic advice needed when we attain the difficult age of waning powers, retirement, and old age. Society must provide this aid and must eliminate superfluous stresses and strains such as overcrowding, poverty, and insecurity.

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