

Note-Raising to Be Impossible

Criminology

Note-raising will be made practically impossible when the new paper money comes into circulation on July 1, 1929, according to the testimony of W. H. Moran, Chief of the U. S. Secret Service, before the House Committee on Appropriations.

This will be true, Mr. Moran states, because of the restriction in the number of designs. George Washington's portrait, for example, which in the past has been on not only one-dollar bills, but on twenty-dollar gold certificates as well will in the future be employed only on one-dollar bills.

"We can now go to the people and say: 'You must not take a bill with Washington's portrait on it for more than one dollar.'"

The new paper money, which will consist of small-size bills in all denominations, will save the Government half a million dollars a year on its paper bill. Four additional notes will be made from a sheet of paper.

While note-raising will be made more difficult with the new currency, Chief Moran of the U. S. Secret Service declares there will be no difference with regard to ease of counterfeiting.

"It will not be easier to counterfeit. It requires just as much skill

Nervous Disease in Industry

Hygiene

Nervous diseases are a frequent cause of sickness absence in industry, studies made by Dr. Millais Culpin of London Hospital have revealed. Apparently these conditions have little or no relation to the work or working environment.

Seven of the first twelve cases on the annual sickness records of one large firm showed losses raging from 94 to 278 days because of nervous diseases. These latter were listed as nervous breakdown, nervous exhaustion, dyspepsia and nervous debility, heart and nervous overstrain. In this particular firm, the workers are reasonably well paid, working conditions are hygienic and the workers are not driven at their work. In firms where the conditions are less pleasant and the work is strenuous, the absence rate for diseases of this type is lower.

Dr. Culpin likens this type of nervousness to that which appeared as shell shock during the war. Its basis is emotional, not physical, although the physical symptoms are very real to the patient.

Science News-Letter, December 22, 1928

and labor to counterfeit a bill of small size as one of large size."

The largest part of the spurious American money coming in from Europe, Moran says, consists of raised bills. "For awhile there was considerable counterfeiting of our currency in Europe. That has now been largely suppressed through the activities of the police departments in Europe."

Though the chief source of counterfeiting activities is in this country, Moran states he has had considerable difficulty with some very expertly-made counterfeits coming out of Mexico.

The average citizen, Mr. Moran says, seldom discovers counterfeit money. "You would be astonished at the character of counterfeit money which is circulated freely among our people. Many of the counterfeit bills are nothing more than printed imitations. Some of them have appeared in circulation recently that were nothing more nor less than carbon copies. Some of them even reversed the image. I think that is largely due to the practice that obtains among the people now of depending upon the distinctive character of the paper."

Science News-Letter, December 22, 1928

A Calendar on Bones

Archæology

A most interesting and valuable pair of specimens in the form of two human femora or thighbones engraved with carefully executed day signs from the Aztec calendar were recently presented to the Los Angeles Museum by Wesley T. Hagadorn.

The bones were obtained in Mexico by Mr. Hagadorn's father some thirty years ago. He secured them from an Indian who found them in the muck of Lake Tezcucuo. The femora are of the same length and are evidently from the same person.

However, the signs upon them vary in several respects. Upon the right femur the symbols begin with the Aztec day sign "Acatl" or "Reed" and end with "Quauhtli" or "Eagle." There are ten signs upon the right femur and eight upon the left.

The workmanship upon the bones is excellent. The designs have been incised with precise neatness that is remarkable. Even when viewed under a microscope no slips of the instrument used in doing the work can be observed.

Science News-Letter, December 22, 1928

Carbon Monoxide

Chemistry—Physiology

Carbon monoxide, deadly gas that gives its victims no warning, is fatal in large amounts, but in small amounts it has no harmful effects on the health or mind of the persons exposed to it, even for indefinite periods of time. Two parts or less of carbon monoxide in 10,000 parts of air is considered a safe amount.

The Bureau of Mines and the U. S. Public Health Service have just completed a study of the effects of this gas, both physical and mental, on healthy individuals. A report of the study will be issued shortly. Six persons who had been examined by competent physicians and pronounced in good physical and mental health were exposed to carbon monoxide in concentration of from 1 to 4 parts in 10,000 for 4 to 7 hours every day for 68 days. They were examined frequently during the test and at its finish by physicians and psychologists. The subjects remained in good health and showed no lack of appetite, no change in weight and no muscular weakness during or after the test. No harmful effects on the minds of the subjects were discovered by the psychologists.

When the concentration of the carbon monoxide was 2 parts per 10,000, half of the people showed no symptoms of carbon monoxide poisoning, such as headache, dizziness or faintness, no matter how long they were exposed. A few at this concentration had headache after three and one-half to four hours exposure. However, when the concentration was raised to 3 parts per 10,000, over half the subjects had distinct symptoms in five hours. Almost all of the people tested showed symptoms within three and one-half or four hours when the concentration was 4 parts per 10,000.

No harmful effects on the minds of the subjects could be found by means of psychological tests now known.

The source of carbon monoxide in this investigation was the exhaust of a gasoline engine. The test showed, among other things, that any ill-effects felt by traffic officers in the Holland Tunnel between New York and New Jersey are not due to carbon monoxide. The concentration of the gas in the tunnel is kept much lower than the lowest used in the tests.

Science News-Letter, December 22, 1928