

## INVENTION

## Flashlights for Industry Built of Semi-Hard Rubber

FLASHLIGHTS for industrial use are built of semi-hard rubber, reinforced internally with brass parts, so that they can take hard punishment. One type, for use in explosive gaseous atmospheres, is so constructed that if the bulb breaks, a cold wire chills the filament instantly. (*Eveready Industrial Flashlights, National Carbon Co., New York City.*)

*Science News Letter, August 9, 1941*

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"The demand for fuel oil in 1939—a record up to that time—was far surpassed in 1940," it is stated. "A gain in exports and a decline in imports of fuel oil in 1939 were just reversed in 1940 when, owing to adverse international trade conditions, exports dropped sharply below the record volume of 1939, while imports, because of an unusual demand for heating oils in the opening months of the year and an expanding industrial program, were double the quantity received from foreign sources in 1939. The running of more crude to stills and a greater percentage yield brought about increased production of fuel oil in 1940 compared with 1939. A downward trend in stocks in 1939, which resulted in a shrinkage of 12 million barrels in the fuel-oil inventory for that year, was checked in 1940 when 6 million barrels were added to storage."

The demand for paraffin wax also established a new record in 1940. In fact, states the *Yearbook*, "Coke was the only major product of petroleum for which the domestic demand was lower in 1940."

*Science News Letter, August 9, 1941*

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### Records of Healing

OLD PHOTOGRAPHS can be of value to botanists and foresters in studying the rate of new growth that heals up old scars left in the forests by fires long ago. Such a series, taken at intervals from 1872 to the present time, has been studied by Ronald L. Ives, former Science Service staff member, as a by-product of several geological field trips into the high country of Colorado.

One particular area was burned over during the Indian troubles of 1862-63. In a few places the soil itself was burned

away, all the way down to bedrock.

In 1872 came the pioneer photographer, William H. Jackson, accompanying the Hayden geological expedition as official picture-maker. His photographs, still extant, show the dead trees bare and barkless, with grass growing among their trunks.

The next series of photographs was taken in 1878. The grass was then being crowded out by a dense growth of mixed shrubs. After that there was a lapse of 20 years during which there is no existing photographic record. For the decade 1898-1908, however, there are abundant photographic records, which show the shrubs yielding place to the next stage in succession, an aspen forest. Maximum density of the aspen was reached in 1915.

As early as 1900 new conifer growth was showing itself here and there, and by 1920 the evergreens were beginning to overtop the aspens in many locations. Photographs taken about 1920 show the evergreens beginning to assert dominance. In some locations they covered 40% of the area. By 1935, the evergreen percentage had risen to 65, and in 1940 dominance was complete, with only scattered patches of aspen here and there, where growing conditions had not been favorable for the conifers.

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## The Scientific Photographer

by A. S. C. LAWRENCE

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