

Sir Humphry Davy

Physics

Sir Humphry Davy, author of our Classic, was born in England in 1778, and might, according to Coleridge, have been a great poet if he had not been a great chemist. During his early school days he took no interest in science and showed no ability except for writing verses and telling stories. When he was 16 he started scientific studies in earnest and at the age of 22 published the result of his researches on nitrous oxide which made his reputation as a chemist. His discovery that the gas (laughing gas) was respirable resulted in its inhalation becoming fashionable. His chief interest, however, was electro-chemistry, which led him to the electrolytic isolation of potassium. He also gave chlorine its name and discovered the resemblance of iodine to chlorine. In 1816 he invented the miner's safety lamp. He was an extremely popular lecturer, in spite of a peculiar manner. He was president of the Royal Society for seven years, resigning because of failing health. He died in Geneva in 1829.

Science News-Letter, September 29, 1928

A Disclaimer

Editorial

Science Service has received from Hubert Sackett, president of the Bonded Tobacco Company, New York, several letters claiming for the products of his company exception from the statements made in an article in the SCIENCE NEWS-LETTER for September 8, under the head, "De-nicotined Tobacco Fraud." This story was based on a report of experiments on "denicotinized" or "denicotined" tobacco products made by the Connecticut Experiment Station, and commented on in the *Journal of the American Medical Association*.

The object of Mr. Sackett's most vigorous protest, apparently, is the phrase "little more than a fraud", used in this story. This is a moderated paraphrase of an expression used in an editorial comment in the *Journal of the American Medical Association*: "Obviously to call such products denicotinized when they contain on an average over 72 per cent. of the amount of nicotine found in ordinary tobacco products, is practically to practice a fraud on the public."

SCIENCE SERVICE specifically disclaims that in using this phrase it had

any intention of applying it to the products of any one concern. It was meant, as the context of the original story shows, to apply to any company which by its labels or advertising tends to convey to the possible purchaser an impression that all, or all but an insignificant fraction, of nicotine has been removed from the products offered for sale.

The labels of the products of the Bonded Tobacco Company bear the inscription "De-Nicotined (Bulk of Nicotine Removed)". The remaining nicotine content is not stated, nor the original nicotine content in the unprocessed tobacco. Mr. Sackett states in a letter to SCIENCE SERVICE that it would be impossible to give the exact original nicotine content of all the tobaccos used by his concern, but that by the word "bulk" as employed on the labels 60 to 90 per cent. is meant. The tobacco is treated, he states, by a vacuum process, aided in a measure by super-heated steam.

The percentages of nicotine in the various products of the Bonded Tobacco Company, together with comparative figures for the strongest and mildest unprocessed tobacco products, as determined at the Connecticut Experiment Station, are as follows:

Sackett cigarettes (two brands) 1.18 and 1.15 respectively; mildest unprocessed cigarettes, 1.14; strongest unprocessed, 3.17.

Sackett cigars, 0.74; mildest unprocessed, 1.27; strongest unprocessed, 2.07.

Sackett smoking tobacco, 1.10; mildest unprocessed, 1.64; strongest unprocessed, 2.29.

"Mild" and "strong" are used here in the ordinarily accepted sense of proportion of nicotine content. The figures are all on the basis of water-free determinations. Work of other analysts, as quoted in the Connecticut Experiment Station report, has shown some unprocessed cigarettes to have a nicotine content as low as 0.43 per cent., and others to run as high as 3.34 per cent. of nicotine.

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Appian Way viaducts built by the Romans in the fourth century B. C. are still in use.

A recent Turkish law provides that there may be no more than one pharmacy to each 1,000 inhabitants of a community.

E. N. da C. ANDRADE Engines

By the author of "The Structure of the Atom"

Dr. Andrade, who is now Quain Professor of Physics in the University of London, has written a fascinating new book. It deals in simple fashion and a wealth of illustration, with the principles upon which the construction of every type of engine is based; it discusses locomotives and turbines, refrigerators and dynamos; it is a book for everyone who has ever wanted to ride in a locomotive or run away in the stoke-hold of a liner. Published Sept. 27th. \$3.00.

A. V. HILL Living Machinery

The complete Lowell lectures for 1927. Professor Hill deals especially with muscles and nerves, but in the process touches upon practically every bodily function. "He is absolute master of his subject. We recommend it unreservedly to all interested in the workings of their own bodies or in the progress of science." *Nation and Athenaeum* (London). Illustrated, \$3.00.

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