

description of the histology or microscopical structural characteristics of the drug or of its powder are given with any degree of thoroughness, and the common adulterants and their characteristics are not even mentioned.

While in some drugs a limit of ash has been added, in many others equally important this has been ignored. As examples, the ash of *Lobelia* has been fixed in this revision at "not more than 12 percent.," but for *Hyoscyamus* no limit of ash is given.

The tenacity with which the English people adhere to the tenets and practices of their fathers and forefathers, their aversity to innovations and the making of radical changes, is a recognized trait of the English. This conservatism of the nation, is reflected in their pharmacopœia and while we criticize in a friendly spirit some of its defects and lack of progress, we recognize that it is a safe and practical book of standards for most of the substances prescribed in British medical practice.

MILS VS. CUBIC CENTIMETERS.*

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The new United States Pharmacopœia will authorize the use of the word Mils to replace the word Cubic Centimeters, and at first there will be undoubtedly some criticism and comment upon the change. The last United States Pharmacopœial Convention recommended publicity of changes of this kind in order that users of the United States Pharmacopœia would become familiar with the subject in advance.

The use of the word Mil is not new, but the first use in a Pharmacopœia occurred in 1914, when the British Pharmacopœia adopted it, and it is likely that its use will become universal in time, at least in the English language. Mil is, of course, the first three letters of the French name originally given to the thousandth part of a liter—Milliliter. The use of the word Cubic Centimeter is really an anachronism and the United States government through its bureau of standards (see Bulletin No. 47, page 12) has declared the word Cubic Centimeter as a misnomer.

Very careful experiments by the government physicists have determined the fact that the Cubic Centimeter is larger than the Milliliter by the inconsiderable fraction of 0.000027. In pharmacy, in chemistry, and in applied chemistry, this difference is negligible, but everyone must have regretted the cubic centimeter blot on the harmony and beautiful simplicity of the metric system. The unabbreviated word Cubic Centimeter is too long for everyday use by the chemists and pharmacists of the world.

In America nine out of every ten scientific men mispronounce the word and use "sontee-meter," and it seems that this habit is very difficult to break up. It should properly be called "centi-meter" as the word is anglicized. It is a gross grammatical error to use a word which is half French and half English. If one must use the French, it should be pronounced "sonte-matr."

* Read at the meeting of the Pennsylvania Pharmaceutical Association, June, 1915.

In actual practice it will be noticed that at chemists' congresses and conventions nearly everyone reads Cc. as "See-sees." These are some of the results following the original error of adopting such a word as Cubic Centimeter officially. In the Government Tables, Ml is used, but Ml is difficult to pronounce, hence an abbreviation can just as well take in a vowel—the i—, and so we have the first syllable of three letters of the word Milliliter. Now Mil can be used with a period indicating that it is an abbreviation, but it is much better to adopt the word Mil, as it will be called, and do away with the period. This will also permit the use of the plural Mills. If the period is retained, it would be awkward and improper to use the plural as Mil.s.

It has been stated by a few of the critics and those who always oppose changes that it will be somewhat confusing because we have already a word in the English language "Mill" which is a United States coin, which we never see—the tenth of a cent; but when this word was coined, we had also the word "mill," used for a building for grinding substances, for students who get diplomas from certain schools, and even for pugilistic bouts, and other equally interesting words; but we will have no other Mil in the English language which is spelled with one l and there is no likelihood of mistake or error when the word is used either in speaking or in writing.

Now, practically, we have only to remember never to say Cubic Centimeter or use the abbreviation Cc. again. As previously said, the change is only a change of name. It does not involve any calculations or changes in formulas. Cross out Cc. and write Mil. Never again say sonti-meter, say, Mil; but it cannot be expected that this reform will immediately go into effect and it will take a little time for all of us to become accustomed to the change.

THE RELATION OF CHEMICAL CONTROL TO INDUSTRO-CHEMISTRY.*

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Successful industries are, for the greater part, dependent upon the chemical laboratory and chemical control.

The excellent laboratory equipment and staff of such establishments as the General Electric Co., Solvay Process Co., Illinois Steel Co., Pennsylvania Railroad Co., Chicago Packing Houses, Parke, Davis Co., etc., proves the truth of this statement.

The constant growth in efficiency of these manufacturing plants is largely the result of organization, and occupying a most important place in such organization, is the research staff, analytical and general testing laboratories.

True, some plants have no chemist at all, and no testing apparatus. Even in Germany there are many plants chemically uncontrolled, working empirically, by formula.

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