

J. M. FRANCIS: I am sorry the gentlemen have failed to get the drift of my remarks. It comes back to the matter of economy and conservation after all. The suggestion as to the use of the stems of belladonna is exactly in line with the idea of using corn for feeding chickens instead of feeding it to human beings. Valuable grain should not be used for stock food when it is needed for feeding people. The alkaloids are present in the belladonna stems and the stems should be used in the best possible way, and I maintain that the idea of conservation would require that they should be used in the same way as the leaves are. What I have said does not apply to the importation of the drug from abroad. I am talking about the conservation of the drug grown in this country.

C. O. EWING: I think the provisions of the Pharmacopoeia cover this question, if the end product is of standard strength.

CHAIRMAN R. P. FISCHER: I make this suggestion; that instead of referring the paper to the Revision Committee it be referred to the Committee on Conservation that is to be appointed. We have asked the Council to appoint a Conservation Committee, and through this Committee it will also reach the Revision Committee.

H. V. ARNY: Then I make the motion that Dr. Schaefer's paper be referred to the Committee on Conservation.

A. R. L. DOHME: The Committee on Standards of the American Drug Manufacturers' Association has made a definite recommendation to the Revision Committee that in the interests of the conservation of belladonna the official requirements of belladonna, instead of being confined to the leaves with a certain amount of stems, include the whole plant. This, I think, should apply to henbane and other drugs as well as belladonna.

C. O. EWING: Right now I am thinking of a drug that should be included—*ipecacuanha* and *ipecacuanha* stems. The U. S. P. VIII specifies that the stems can be of certain length—I don't recollect the exact figure—and the present Pharmacopoeia specifies 5 percent of stems. Within the past year quite a number of samples of *ipecacuanha* and *ipecacuanha* stems have been assayed in the Department, and in a number of instances we found that the stems contained more alkaloid than the root itself. It is waste not to use a valuable product.

A. R. L. DOHME: Nearly fifteen years ago I presented a paper before the Scientific Section of this Association in which I proved that the stems of *ipecacuanha* were richer in alkaloid than the root, and, at that time, I recommended to the Revision Committee the inclusion of the stems of *ipecacuanha* as well as the root. In that same paper I brought out the point that the Carthagena *ipecacuanha* was even more rich in alkaloids than the Rio, which was the only one officially recognized, and the Revision Committee, in its wisdom, adopted the idea of making the Carthagena official as well as the Rio. I contend that the stems should be made official as well as the root.

C. O. EWING: There is no question at all but that we have the finest pharmacopoeia extant, but there is still room for improvement. It needs some revision and it is needed now. I do not think that we should wait as long as we ordinarily do for the next revision.

C. H. LAWALL: We are working on the Supplement now, which we hope to have ready at the time of the next Convention. If any of you gentlemen have any specific recommendation please send them in to the Revision Committee as soon as possible.

The motion to refer the paper under discussion to the Conservation Committee was adopted, and also a motion by A. R. L. Dohme requesting the U. S. P. Revision Committee, if possible, to issue the Supplement, covering important items, during this year. Other subjects of conservation, not closely related to the paper, were presented; these will be reported in the minutes of the Section.—  
EDITOR.

### THE ADVANCE BY KILOMETERS.\*

BY H. V. ARNY.

Recently a friend of the writer, requested to subscribe to a war-fund in the guise of "a mile of dimes," responded as follows:

While I heartily approve of your fund, I disapproved with equal heartiness of the way in which the money is raised. To an ardent metricist like myself the

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\* Read before Section on Commercial Interests, A. Ph. A., Chicago meeting, 1918.

securing of miles, yards and feet of dimes is objectionable. I find a dime measures 18 millimeters across and I therefore take pleasure in subscribing to 900 millimeters of dimes and enclose my check for \$5.00 covering this length.

The above problem affords a peculiarly pertinent comparison between metric and our Elizabethan Standards. The measuring of a dime with calipers shows its diameter as exactly 18 millimeters, or about  $\frac{23}{32}$  of an inch. Neither figure is a convenient one for calculations and yet despite this handicap note how much simpler is the metric arithmetic than is the figuring by the old standard.

Mentally we can calculate:

18 mm.	=	10 cents
90 mm.	=	50 cents
900 mm.	=	\$ 5.00
9 meters	=	\$ 50.00
9 kilometers	=	\$50,000.00

And one kilometer (or one-ninth) represents the repeating decimal  $\$5.555\overline{.555}$ .  
Now for "the mile of dimes."

Mentally we may calculate:

$\frac{23}{32}$ inch	=	10 cents
23 inches	=	\$3.20
12 inches	=	$\frac{12}{23} \times \$3.20$

and there our mental arithmetic stops and we have to turn to multiplication and to long division:

$$\begin{array}{r}
 3.20 \\
 12 \\
 \hline
 23 \overline{)3840} 1.67 \\
 \underline{23} \phantom{00} \\
 154 \\
 \underline{138} \phantom{0} \\
 160 \\
 \underline{161} \\
 \hline
 \end{array}$$

to find that one foot of silver dimes equals \$1.67 which the promoters of the scheme call \$1.70 to 17 dimes. Having gotten one foot, let us take paper and pencil and calculate the mile of dimes. An easy job for a summer siesta; merely multiplying \$1.67 by 5280:

$$\begin{array}{r}
 5280 \\
 \$1.67 \\
 \hline
 36960 \\
 31680 \\
 5280 \\
 \hline
 \$8817.60
 \end{array}$$

Thus, through much tribulation, we arrive at the fact that an English mile of American dimes will total \$8,817.60.

As I understand the request of the chairman of this Section, his desire was a paper on how the metric system was capable of winning the war. In one sense the war is being won by the metric system, for thank God! the news now coming to us shows that our brave boys and the boys of our allies are winning the war, kilometer by kilometer. To this it might be added that the winning of the war by the allies would have been an easier task had all of us, English and Americans, as well as French, Belgians and Italians, spoken the universal language of weights and measures, the metric system. This is shown by the request of the French authorities just after we entered the war that we pitch in and manufacture the 75 millimeter gun rather than continue with the regulation United States gun of somewhat similar calibre.

But my intention is not so much to discuss what the metric system is doing to win the war for us Americans, as what the war will do toward making this a metric country.

There is not one of our group of ardent metricists who is advising the arbitrary changing of standard in this period of storm and stress. That the operations in France will bring about a trend toward metric units, especially in the machinery trade, is apparent, as for instance the adoption of the 75 millimeter gun. In fact only a month since a gentleman manufacturing taps and dies—a line that constitutes an anti-metric stock argument by the way—told the writer that over half of the screws and nuts that he is now turning out are on a metric basis. That the millions of our boys and our war workers will come back from France thoroughly familiar with metrics, and therefore metric advocates, goes without saying. And the advance of the Allies by kilometers, as read in our daily press, will gradually educate our general public to understand that meters, liters and grammes are not the fantastic creations of cob-webby brains, that anti-metricists would have us believe.

In conclusion, a word on scrapping. The best "scrapers" of all, the anti-metric protagonists hold before the eyes of their supporters, notably in the machinery trade, the awful consequences, the financial ruin, that awaits them, should the metric system become generally used in this country, by reason of consigning valuable machinery to the scrap heap.

The argument is as foolish as are most half-truths. It is about as reasonable as to argue that it is good business to continue to use a soda fountain of the vintage of 1890 instead of buying a modern sanitary apparatus because forsooth the scrapping of the antique "fizz squirter" will mean the loss of a few hundred dollars.

It is on a par with the short-sighted policy of most American coke oven operators prior to the war in refusing to scrap their archaic "beehive" plants and as a result we all know that the beginning of 1915 found us confronted by a coal-tar famine.

The "beehive" ovens were scrapped that year and were replaced by "recovery" ovens at great expense, but that expense has been paid several times over since then by the increased profits accruing from the saving effected by recovery-oven operation.

A final instance of scrapping that may be cited is one affecting the tire indus-

try. A year or so ago, the writer discussed with a scientific friend connected with a great rubber corporation, the campaign of education carried on by the American Metric Association and found a sympathetic listener, so sympathetic that the gentleman in question took up the matter with the executives of his company. Later he reported that the officials hesitated about taking a stand favoring the metric system as a change from old standards to metric ones would mean thousands of dollars of molds consigned to the scrap heap. Again we were confronted by the scrapping bugaboo.

It was therefore with surprise and interest that the following news telegram was noted in the daily papers:

Washington June 28. Immediate reduction in the number of types and sizes of automobile tires from 287 to 32 has been determined upon by automobile tire manufacturers in accord with recommendations of the Conservation Division of the War Industries Board. Under the program announced to-day, by Nov. 1, 1920, all but nine types and sizes will have been discontinued.

Here is a case of wholesale scrapping in the service of efficiency and economy engaged in by the same business men who a year since disapproved of scrapping tire molds. As in this case, the adoption of the metric system will mean some scrapping, but it will mean scrapping in the service of efficiency, and economy and in the conservation of time; the most important asset that we possess in these stirring days.

## POWDERED IPECAC.

### SHOULD IT BE RECOGNIZED IN THE PHARMACOPOEIA.\*

BY WILLIAM W. DAVIES.<sup>1</sup>

The Government has been in the market for supplies of Powdered Ipecac and recent assays made at the Chemical Laboratory of the Medical Supply Depot, U. S. Army, New York, N. Y., have invariably been of high test drug. As a result of this, it occurred to the writer that a standard, giving the maximum percent of ether-soluble alkaloids which should be found in Powdered Ipecac, would not only help to conserve the supply of this drug but also would insure a greater uniformity in dosage and in the products compounded with it.

The U. S. P. IX, which gives a minimum requirement of 1.75% ether-soluble alkaloids for the "whole drug," but sets no maximum limit, does not recognize Powdered Ipecac.

Samples of the "powder" tested here have assayed as high as 2.45% alkaloids, or 40% stronger than the minimum requirement of the U. S. P. IX for the "whole," namely, 1.75% alkaloids.

**U** In Circular No. 6, issued August 1918, the War Department asked for bids on 500 pounds of Powdered Ipecac. If this should have been furnished with 2.45% of alkaloids it would be equivalent to 700 pounds of the drug testing 1.75%, in other words there would be 200 pounds of Ipecac taken out of the market unneces-

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<sup>1</sup> Sergeant, Medical Department, U. S. Army.