

SCIENCE

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THIRD ANNUAL PURE FOOD AND DRUG CONGRESS.

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IN harmony with a call issued by the Executive Committee, the third annual Pure Food and Drug Congress of the United States, assembled in Washington, D. C., on March 7th.

Delegates to this Congress were appointed by the Governors of the several States; by the State boards of agriculture and health; by the agricultural colleges and experiment stations; by the national trade organizations, both by wholesalers and retailers; by the National Grange; by the State Granges and by various other organized bodies. Over five hundred delegates were appointed and about three hundred attended the meeting, thirty-five States and Territories being represented by delegates in actual attendance. The meeting was a thoroughly representative one in every particular.

The principal object of this Congress was to promote national legislation relating to the inter-state traffic in adulterated foods, to provide inspection of food products shipped abroad and to regulate the sale of food products in the Territories of the United States and the District of Columbia. Under the constitution the power of the Congress cannot go farther than this.

For many years agitation in regard to this legislation has been going on, and the fundamental principles of the measure agreed upon have been endorsed by the

various interests represented in this and the previous Congresses. The necessity for such legislation is apparent to every one. State laws are effective only when supplemented by national legislation. As long as adulterated foods are permitted to enter one State from another it is not possible for the State authorities to reach the real offender. The State courts can only punish the citizens of their own State, whereas the real culprit may reside across the State border in another jurisdiction. One of the best provisions of this measure, which has been endorsed by this Pure Food Congress, is that the original manufacturer or producer of the goods can be punished, while the innocent retailer or dealer may escape, by tracing the articles to their original source, and thus furnish evidence to convict the primary offender.

Another excellent provision of the proposed law, as endorsed by the Congress, is the inspection of food products intended for export to foreign countries. It is well known that many of our food products have been unjustly condemned in foreign countries, on alleged sanitary grounds or on alleged imperfections. Inasmuch as these food products have received no inspection before leaving the country it is quite difficult for our citizens to establish the character and purity of their exported food products. With rigid inspection by Government officials, before export, it would be a comparatively easy matter to maintain the rights of our food products in foreign countries. By reason of the increased scope and magnitude of the work of the Division of Chemistry and in harmony with the recommendations contained in the last annual report of the Secretary of Agriculture, to the President of the United States, the proposed legislation endorsed by the Pure Food Congress raises the Division of Chemistry to the dignity of a bureau.

Another excellent feature of the proposed measure is the absence of annoying, restric-

tive or prohibitive clauses. The pure food bill, as recommended by the Congress, does not inflict upon any honest dealer any rules or regulations, which will interfere in any way with his trade or make it difficult for him to conduct his business.

If the question of wholesomeness arises a provision is made for its study in a thoroughly impartial and effective manner. The bill provides for a board to be appointed by the President of the United States and the Secretary of Agriculture conjointly, consisting of five physicians, three of whom are to represent the Army, Navy and Marine Hospital Service, to be appointed by the President; a board of five experts, who are eminent in physiological chemistry and hygiene, to be appointed by the Secretary of Agriculture; and these together with the Chairman of the Committee on Pure Food Standards of the Association of Official Agricultural Chemists and the Chief Chemist of the Department of Agriculture of the United States, will form a board of twelve persons to whom all matters relating to wholesomeness of food products, or of materials added thereto, will be referred. It is evident that such an unbiased body will be able to reach conclusions, after proper investigations, which will merit the confidence of the country.

The administration of the law is confided to the Secretary of Agriculture, who is authorized to make all needful rules and regulations for carrying out the provisions of the act, and in doing this is to make use of the chemists and appliances of the Division of Chemistry of the Department of Agriculture. This method of administration has been approved of at all of the sessions of the Food Congress as being the wisest, most efficient and the most economical method of securing the purposes in view. The Secretary, at his discretion, can make use of the chemists and appliances of the various States engaged in food inspection, in order to render the

service local, where the infringement of the law may have taken place.

The only element of discord in the Food Congress was developed by a proposal to establish an entirely independent food bureau, with an independent chemical laboratory, for the administration of the law. The head of this bureau, it was proposed, should be appointed by the President, for a term of four years, thus making the administration of the pure food law subject to frequent political changes. This provision was debated at great length for two days and at times with a degree of acrimony which indicated that some of the promoters of pure food legislation were more anxious to secure a new office than to establish a food law. At the end of this discussion the original plan, endorsed by previous Congresses, passed by a large majority and the bill thus approved was adopted without a dissenting vote.

On the third day of the Congress, by the invitation of the Committee on Interstate Commerce of the House of Representatives, a large number of the delegates attended the meeting of the Committee, at which the merits of the bill were presented in five minute speeches, by the representatives of the various industries attending the Congress.

In the interests of the public health and public honesty, it is to be hoped that the measure which has been recommended for the third time by this national Pure Food Congress, and which has the approbation of all the great trade interests of the country, will be pushed to a speedy vote and become a law before the present session of Congress adjourns.

THE ACCURACY OF THE EXPERIMENTAL
METHODS OF THE CHEMIST.*

ON occasions like the present, where intellectual labor is the chief aim of those

* Inaugural address of the Rector of the Technischer Hochschule, Graz, Hungary. Translated by J. L. H.

who are assembled together, it is a frequent practice for the speaker to offer to his audience something of the fruit which he has gathered from his own investigations. To the thought which lies at the foundation of this custom, are due those inaugural addresses which can lay just claim to being contributions to scientific knowledge. Other speakers prefer to furnish to these cultured circles a glimpse into the workings and tendencies of the higher institutions of learning. It were to me a great pleasure, esteemed colleagues and fellow students, could my efforts to-day draw me closer to you ; at all events this address shall serve as a greeting of welcome from the Rector, now entering upon his office, to all those who are connected with this *Hochschule*, and to all those who feel in it a kindly interest. And it is in this last sense that I beg leave to offer a few thoughts upon

THE ACCURACY OF THE EXPERIMENTAL
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It is the well recognized task of scientific investigation to discover the truth, and in those cases where this is not possible, to approximate it as closely as possible. In the natural sciences we may look upon this goal as attained when it is possible, in the broadest sense of the word *to describe* that which is appreciable to the senses. For this purpose it is generally insufficient merely to allow the object to act directly upon the senses, without in any way modifying its natural conditions ; we must avail ourselves of external assistance which either shall like a lens render our observations more accurate, or shall make possible the study of the object under changed outward conditions. On the one hand we use meter stick, balance, microscope ; on the other Bunsen burner, electrolytic cell, Röntgen apparatus, and the like. One need but cast a glance into the workshop of our investigator to see what an arsenal of appa-