

of Los Angeles, have a process which consists in placing the garbage, as collected, in a direct heat steam dryer. The dried product, which amounts to about 18% by weight of the garbage, is sold for poultry food, bringing as high as \$40 per ton. This would indicate a gross value of the garbage of \$7.20 per ton. The process has been considered at Kansas City, Mo.

A process for the production of alcohol from garbage, under patents held by Dr. S. J. Morgan, has been tested (1916) on an experimental basis at Columbus, Ohio. These tests showed a possible yield of 4.8 gals. of alcohol per ton of garbage, which, at 40 cts. per gallon, indicates a gross value of \$1.92 per ton of garbage. It appeared from the tests that the recovery of grease and tankage was not materially affected by the alcohol recovery process.

There are, of course, other processes, such as that of Dr. Marsh, recently considered at St. Louis, which the inventor guarantees will yield "at ordinary market prices" not less than \$3.60 per ton of garbage; the "Nufuel" or "Oakal" process for making fuel briquettes; and others.

#### Summary

The writer does not feel justified in offering any conclusions in this paper except that garbage disposal should be considered with a view, where possible, to an economic recovery of valuable constituents. The lure of profit, however, should not overshadow the development of operation for the convenience and comfort of the householder and for the economy of collection.

It is a mistake to arouse public opinion on the matter of disposal where other parts of the problem are of equal importance and sometimes more costly. Nevertheless, economy of operation, elimination of waste, the salvage of useful and essential materials, are matters of vital importance in the present development of society, and the skill and efficiency with which they are done will reflect the general progress of the community.

This means that the economic value of valuable constituents of garbage and other refuse materials must be considered with the house treatment and collection, first cost of plant, overhead and fixed charges, and costs of operation. When and where the problem is approached in this broad, sound way, the writer believes that methods of disposal involving the recovery of valuable constituents will endure and will permit of operation without the interruptions and changes of method which now occasionally occur.

The Mechanical Engineering Department of the University of Manitoba, Winnipeg, Man., requests all firms manufacturing mechanical machinery and apparatus of all kinds to place the department on their mailing lists for catalogues, bulletins, etc.

Boynton & Williams, dealers in contractors' supplies, have moved to new and larger offices and warerooms at 42 Lombard St., Toronto. George P. Beswick, secretary of the Purchasing Agents' Association, and for twenty years with the Polson Iron Works, Toronto, has been appointed office manager and purchasing agent of the Boynton & Williams organization. At the new warehouse a large stock of pipe, valves and fittings is being carried. The firm also acts as representatives for a number of American manufacturers, and deals in new and used machinery.

In a circular letter sent to water companies and departments by the American Water Works Association, the formation of the American Committee on Electrolysis is announced, with representatives from water, electrical and railway engineers' and gas associations, etc., the purpose of this committee being to gather and classify information regarding electrolysis and to study and report on methods of construction and means of mitigation. The committee will co-operate with the Bureau of Standards in carrying out experiments and investigations and it is proposed that Prof. Lewis Allen Hazeltine, of Stevens Institute, should serve as a technical expert on the consulting board, on behalf of the interests of the water companies and departments. Subscriptions towards a fund of \$3,000 to finance this work are now being solicited.

## NO ROOM FOR TRADE UNIONISM IN ENGINEERING PROFESSION, SAY DIRECTORS OF AMERICAN ASSOCIATION OF ENGINEERS

**F**OLLOWING is a statement that has been issued by the executive committee of the American Association of Engineers, setting forth the position of that association in regard to trade unionism in the engineering profession:—

*Reason for Statement.*—In the present state of industrial unrest, the Board of Directors of the American Association of Engineers considers it desirable to make a statement defining the position of the association.

*Responsibility.*—The American Association of Engineers is an incorporated organization responsible for its acts.

*Economic Position of the Engineer.*—The engineer is the medium through which both capital and labor are used in production and in industrial development. The aim of the profession is to advance civilization and render the highest service to society. Except when their acts further this aim, it is an advocate of neither capital nor labor.

*Increased Production.*—Production should be increased—not limited. The profession cannot support strikes or lock-outs or any other methods that may benefit any class at the expense of the nation as a whole. They are unsound and must inevitably lead to economic disaster. The law of supply and demand for men or material must ultimately prevail. Attempts may be made to limit the supply of either, but looking toward the upbuilding of civilization, we believe rather in increasing the demand through the promotion of legitimate enterprises.

*Reward According to Merit.*—Rewards should be according to ability, initiative and constructive effort. Men are not equal in these respects. Each man should be encouraged to do his utmost and be given compensation according to ability and will to increase production and to achieve large results.

*Methods.*—The engineer, as an educated professional man, believes in basing his claims for proper and just reward for his services upon the justice of the facts presented, upon enlightenment of public opinion, upon loyalty between employer and employee, and upon the underlying fundamental desire of the great majority to do what is fair and right when the merits of the case in question are clearly presented and demonstrated. We believe in organized representation for the correction of wrong, the advancement of the profession and service to the public, but are opposed to methods inconsistent with the dignity of the profession and which would lessen public confidence.

*Conclusion.*—The American Association of Engineers, through its Board of Directors, who have signed this statement, recognizing the many fundamental differences between the principles and objectives of the trade union and of an organization of professional men, expresses the opinion that an engineer cannot subscribe to the tenets of both.

Signed by Dr. F. H. Newell, head of department of civil engineering, University of Illinois; W. W. DeBerard, western editor, Engineering News-Record, Chicago; T. A. Evans, assistant engineer, Jacobson & Schraeder, Chicago; R. Burnham, consulting engineer, Chicago; W. W. K. Sparrow, chief engineer C. M. & St. P. Ry., Chicago; Harold Almer, consulting engineer, Chicago; J. N. Hatch, consulting engineer, Chicago; F. K. Bennett, principal assistant engineer, M. & St. L. Ry., Minneapolis; H. W. Clausen, general office manager, C. D. Osborne Co., Chicago; C. A. Soans, patent attorney, Chicago; W. D. Wilcox, past president, American Association of Engineers; L. K. Sherman, U. S. Housing Corporation, Washington, D.C.; Isham Randolph, consulting engineer, Chicago; Alexander Potter, civil engineer, New York; E. F. Collins, valuation engineer, St. L.S.F. Ry., St. Louis; C. H. Crawford, manager, Baldwin Locomotive Works, Philadelphia; John Ericson, consulting engineer, Department of Public Works, Chicago; and C. E. Drayer, secretary, American Association of Engineers.

(NOTE.—Since the above statement was received, we have been advised by C. E. Drayer, secretary of the American Association of Engineers, that all of the other directors of the association have added their signatures to the statement, making it unanimous.—EDITOR.)