

## EDITORIALS

### INTERNATIONAL ENGINEERING CONGRESS

The dates for the great International Engineering Congress to be held in San Francisco during the Panama-Pacific Exposition have been definitely announced as September 20-25 by W. F. Durand, Chairman of the Committee of Management. The Congress is to be held under the auspices of the American Society of Civil Engineers, the American Institute of Mining Engineers, the American Society of Mechanical Engineers, the American Institute of Electrical Engineers and the Society of Naval Architects and Marine Engineers. Colonel G. W. Goethals has consented to act as Honorary President and is expected to preside in person over its general sessions.

The papers to be presented before the Congress will cover the general field of engineering. They are intended to treat the various topics in a broad and comprehensive manner and with special reference to the important lines of progress during the past decade, the present most approved practices and the lines of present and future development. It is intended, furthermore, that all such papers shall be accompanied with a reasonably full bibliography of the subject, giving references to the important original papers and sources of information relating to the special topic of the paper. The authors of the papers are distributed over the engineering world, and comprise men eminent in the various branches of the profession.

A special effort will be made to procure discussions, carefully prepared in advance, for presentation with the papers. In addition, opportunity will be afforded for oral discussion at the various sessions of the Congress. It is anticipated that limitations of space may require the ultimate publication of all discussions in condensed or summary form. Discussions will be welcomed in any language at the choice of the writer, and if in other than English will be translated for publication.

The various papers, some 300 or more in number, will be presented before the Congress in 10 or more sections closely approximating the division of subjects by volumes.

The meetings will be held in the new Auditorium building in the Civic Center of San Francisco, in which the Panama-Pacific International Exposition authorities have reserved for the week of the Congress a sufficient number of assembly, section and committee rooms to fully meet all requirements of the Congress.

Subject to necessary modification, the transactions will be published in 10 volumes, 6×9 inches in size, and of about 500 pages each, with one smaller or half volume which will contain the reports of the general or business meetings of the Congress, together with a title and author index and a brief digest of each paper presented.

The schedule of volumes is as follows:

VOLUME I—THE PANAMA CANAL (24 TOPICS)
VOLUME II—WATERWAYS (6 TOPICS)
IRRIGATION (11 TOPICS)
VOLUME III—RAILWAYS (7 TOPICS)
VOLUME IV—MUNICIPAL ENGINEERING (8 TOPICS)
VOLUME V—MATERIALS OF ENGINEERING CONSTRUCTION (20 TOPICS)
VOLUMES VI AND VII—MECHANICAL ENGINEERING (28 TOPICS)
ELECTRICAL ENGINEERING (8 TOPICS)
VOLUME VIII—MINING ENGINEERING (10 TOPICS)
METALLURGY (10 TOPICS)
VOLUME IX—NAVAL ARCHITECTURE AND MARINE ENGINEERING (19 TOPICS)
VOLUME X—MISCELLANEOUS
INDEX AND DIGEST

All engineers and all others who are interested in engineering work, its progress and achievements, are cordially invited to subscribe as members of the Congress.

The general fee for membership in the Congress, open to all engineers or others interested in engineering subjects, is \$5.00 U. S. Gold, which will entitle the member to receive the index volume and any single volume of the transactions he may select, together with the right of participation in all general activities and privileges of the Congress.

It is expected that there will be arranged a number of excursions to points of engineering and general interest within practicable reach of San Francisco, and every effort will be made to make possible the personal inspection of such engineering works as are especially typical of the Pacific Coast.

### A STATISTICAL REVIEW OF THE QUESTION OF GASOLINE SUPPLY

Some three or four years ago the question of an adequate supply of gasoline threatened to become acute. This situation was brought about by causes the most important of which are familiar to all interested in petroleum. During the brief period of the last three years a large number of patents have appeared, which have for their object the increasing of the yield of gasoline, some of them constituting real advances in petroleum technology and others interesting because of the bizarre transformation which matter, in the form of petroleum, is made to undergo. The situation just prior to the introduction of improved methods of cracking is here briefly reviewed.

Reliable statistics of the production of gasoline are not available, particularly in this country, the largest producer up to the present time. A better index of available gasoline is obtained by reference to the crudes which yield it. The world's production of petroleum since 1900 is graphically shown in Fig. 1. Attention should be called to the fact that the greatest increases in the production of crude have been in fields yielding heavy oil containing little or no gasoline, as is the case with California and Mexican oils. Arnold and Garfias (*Bull. Am. Inst. Min. Eng.*, 1914, p. 394) place the probable maximum annual production of California at about 100,000,000 barrels. Rear Admiral Edwards (*Bull. Am. Inst. Min. Eng.*, 1914, p. 2293) has recently expressed a similar opinion. On