

the realm of applied thermodynamics. The work of the past year has been in this line of investigation and the results have sustained the view of Commodore Isherwood.

The schedule of proposed work for the year 1900 includes the study of the effect of 'throtling' steam, as proposed by Isherwood.

The publication of these documents for the use of the Congress of Applied Mechanics at the coming International Exposition at Paris gives all interested in this department of research and in this kind of instruction an opportunity to learn just what are the methods employed, the apparatus used and the character of the researches best adapted for laboratory work of this sort in the instruction of the young engineer and physicist, as arranged by a pioneer in this field.\* The work reported has been extensive, important and admirable in method and in its execution. It has been conducted under circumstances of very great difficulty, patiently, carefully, persistently, and while few who have not kept in touch with it while in progress can realize what labor and sacrifice have been involved, every specialist in this department will recognize its value and elegance.

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#### A NEGLECTED DEPARTMENT.

THE American Society of Mechanical Engineers is issuing to its members a circular, prepared by its Council, calling attention to the neglect of the Patent Office of the United States by Congress, to its importance to the country and to its hopped condition as produced by the refusal of Congress to provide for either suitable accommodations or a sufficient clerical force and staff of examiners. Members of the Society are urged to force upon the attention of their members of Congress the necessity of "providing sufficient room, force and facilities for the prompt and proper execution of its work," that arrangements be made at once for "providing incom-

\* Documents sur le Laboratoire de Mécanique de l'Université de Liège, et sur l'Enseignement qui y est donné par V. Dwelshauvers-Dery, Professeur de mécanique appliquée et de physique industrielle. Liège, Charles Desoer, Editeur, 1900.

bustible receptacles for the records," which records "largely constitute the legal evidence of title of so many of the larger industries of the country," that the library be kept up and properly cared for, that the Patent Office be given the entire control and use of its own building—now occupied largely by 'squatters' from other bureaux—and that its earnings be dedicated to its own purposes and improvement. The Patent Office is 'out of practical politics,' and is only prevented from doing its full duty to the country by its lack of space and of force. Yet, up to January 1, 1899, 693,979 patents had been granted, and 41,422 trade-marks registered. Last year alone 25,527 patents and 2260 trade-marks were added to the record. The accumulations of records and of exhibits has come to be so great as to put it quite beyond the power of the restricted force in its restricted space to properly store, arrange, classify and care for them. The library, which it is imperatively necessary to keep up to the highest state of efficiency, and which should be a complete collection of the technical publications of the world, and of all time, was last year only allowed \$1500 for purchases of books. No funds at all were obtainable for the law library. The whole business of this department of government, upon which the success of our great industries is so absolutely dependent is trammelled, and every industry of the country is embarrassed, by its forced inefficiency. This inefficiency is entirely due to the indifference of Congress. The Patent Office has accumulated out of its own earnings a large amount of available capital—several millions of dollars—and it has not been even allowed to draw upon its own funds to meet imperative needs.

So indifferent, in fact, have been some Congresses that it is within the experience of the writer that important matters of business, involving large interests, have been delayed for weeks through the impracticability of securing a full meeting of a committee, repeatedly called.

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#### MUSEUM OF THE STATE OF NEW YORK.

DURING the winter season, the energy of the museum staff has been concentrated on an im-