habitants, and the expenses are to be paid out of the borough fund. The board of any district within the limits of an improvement act, may under similar circumstances, adopt the act. Upon a requisition of at least ten rate-payers, a meeting of the parish may be called, and if two-thirds of the rate-payers then present shall determine, the act shall come into operation in the parish, and the expenses of the same are to be paid out of the poor-rate. Further the act provides that if any meeting called in any borough, district, or parish, shall determine against the adoption of the act, no meeting for a similar purpose shall be had for the space of one year at least from the time of holding the previous meeting.

REPORT OF THE DEPARTMENT OF SCIENCE AND ART IN ENGLAND.

The report of the department of science and art, from the pen of Dr. Lyon Playfair, has just been published in the form of a blue-book, with numerous and lengthy appendices. It is dated the 1st January last. Dr. Lyon Playfair sums up his report by observing generally, that the department has made a marked advance in extending instruction in art to elementary schools; 10,500 children having received such instruction through its agency. In concert with the Committee of Council on Education, it has enabled 1,044 teachers of public schools to learn drawing at the local schools of art, with a view of introducing it into their own schools, and 1,270 masters, at various training colleges throughout the kingdom, have been examined for certificates in elementary drawing. Means of illustrating the courses of instruction have been widely spread, and, in addition to the usual trade supply, 294 schools have obtained examples through the department, at an average cost of six guineas for each school. The local schools throughout the provinces have been attended by nearly 20,000 persons, chiefly artisans. The museums of the department have been visited by above 204,000 persons, and the Art Library at Marlborough-house by nearly 8,000. The exhibition of students' prize-drawings in the provinces has been inspected by above 66,000 persons, and the Botanical and Zoological Gardens in Dublin have had above 135,000 visitors. The Central Schools in London continue to be made as useful as possible to the schools throughout the kingdom, and have been the means of providing well-trained masters for the provincial schools. The public services connected with the department continue in an active state. In regard to the financial expenditure of the department, it is asserted that every effort for economy has been made, and, of the aggregate sum of £79,846 voted last year, it is expected that more than £17,000 will be repaid into the Exchequer at the close of the financial year.

EDITORS IN PARLIAMENT.

The press in England certainly cannot complain that it is not fairly represented in high places. The London Athenæum says: "There are more proprietors, editors, and correspondents of public journals in the present House of Commons than at any previous period. Among leading debaters in that House are to be found some of the most powerful writers of the day. The Chancellors of the Exchequer are men who have occupied equally distinguished positions in literature, and the Lords Lieutenant of Ireland are elegant essayists, pleasant versifiers, and accomplished authors of diaries. In fact, the distinction and antagonism between the worlds of politics and literature seem fast dying out to the advantage of both, we would fain believe. While the one becomes more enlightened, it is to be hoped the other will gain in robustness and healthiness of tone."

CONVERSION OF THE ARABIAN DESERT INTO AN OCEAN.

Captain William Allen, of the British navy, has published a book advocating the conversion of the Arabian Desert into an ocean. The author believes that the great valley extending from the southern depression of the Lebanon ranges to the head of the Gulf of Akaba, the eastern branch of the head of the Red Sea, was once an ocean. It is in many places, 1,300 feet below the level of the Mediterranean, and in it are situated the Dead Sea and the Sea of Tiberias. He believes that this ocean, being cut off from the Red Sea by the rise of the land at the southern extremity, and being only fed by small streams, gradually became dried by solar evaporation. He proposes to cut a canal of adequate size from the head of the Gulf of Akoba to the Dead Sea, and another from the Mediterranean, near Mount Carmel, across the plain Esdrælon, to the fissure in the mountain range of Lebanon. By this means the Mediterranean would rush in, with a fall of 1,300 feet, fill up the valley, and substitute an ocean of 2,000 square miles in extent, for a barren, useless desert; thus making the navigation to India as short as the overland route, spreading fertility over a now arid country, and opening up the fertile regions of Palestine to settlement and cultivation.

THE CANADIAN INSTITUTE OF UPPER CANADA.

As the Canadian Institute is a Provincial institution, and numbers among its members persons residing in all parts of Upper Canada, we have much pleasure in transferring to the columns of this *Journal* the following notice from the *Globe*:—This flourishing institution, which already reflects so much credit on the Province, has experienced its share in the vicissitudes which have affected so many of our local bodies in consequence of the transfer of the Seat of Government to Toronto. The following circular, which has been prepared for circulation among the members and friends of the Institute, will best explain the nature of the plans contemplated, in consequence of the changes forced upon it by the deprivation of the rooms temporarily occupied in Government House. Mr. G. W. Allan, whose valuable gift of land gave the first impetus to the movement for permanent buildings, has since, we learn, greatly enlarged his gift. The site originally presented by him measured 90 feet of frontage by 150 in depth. But at the last meeting of the Council of this Institute, Mr. Allan intimated his intention of augmenting it by the addition of the adjoining lot, measuring 64 feet in frontage, thereby presenting to the Institute an area measuring altogether 154 feet front by 150 feet in depth; a site which will amply admit of every augmentation that the most sanguine of the friends of this institution can hope for, for many years to come. It now remains for the members and friends of the Institute to do their part, and we feel assured the following appeal to their liberality will not be made in vain:—

Circular from the Council of the Canadian Institute.

The anticipated removal of the Seat of Government to Toronto, and the consequent ejectment of the Canadian Institute from the rooms allotted to them in the old Government House, has forced on the attention of the Council the necessity of providing accommodation for the Institute in a building suited to the purposes for which it is established, and to the position which it has already achieved as a Provincial Scientific Institution. In taking the requisite steps for this purpose, one great difficulty has been removed—by the gift, by G. W. Allan, Esq., of a valuable site in Pembroke Street, on the Moss Park Estate; and on application being made to the Government, two successive grants of £500 each have since been obtained in aid of the Building Fund. Under these very favorable circumstances, the Council have determined upon appealing to the Members of the Institute, as well as to all persons likely to feel an interest in the success of the first purely scientific institution founded in Upper Canada. The Council anticipate that at least £500 may be thus readily obtained, thereby increasing the building fund to £1,500, and providing a sum which will justify them in commencing immediate operations. The building which the Council propose to erect is designed with a view to admit of additions hereafter, so as ultimately to provide accommodation for the Museum, Library of Reference, Reading Room and apartments for transacting the ordinary business of the Society; the present cost not to exceed £2,500. It is proposed that the subscriptions be paid either at once or in the following manner: one-fourth immediately, and the remainder at six, twelve, and eighteen months thereafter; the mode of payment being at the option of the donor. Gentlemen proposing to subscribe are requested to transmit their names, with the remittances, or a statement of the amounts they intend to subscribe, to the Treasurer, James Stevenson, Esq., Bank of Montreal, Toronto, as speedily as possible, in order to enable the Council to commence the building without delay. Building Committee: G. W. Allan, Esq., D. Wilson, L.L.D., H. Croft, D. C. L., F. W. Cumberland, Esq.

THE FIRST TIME KEEPER MADE OUT OF CLAY.

M. Raby writes, from Paris, that this great industrial achievement was deposited at the Exhibition on August 22, and that it was inspected by the Queen and Prince Albert with amazement and admiration. The following is an extract from his letter:—"My famous pocket chronometer, made out of the precious aluminium, has been placed in the Panorama, alongside of the bars of the same metal; it keeps time very correctly. All the works, plates, cogs and wheels, are made of aluminium; and I really believe it is much better for purposes of this kind than the other metals generally employed. It is much lighter, does not require so much power to conduct the wheels, and therefore, with a heavy balance, will obtain a better result of regularity. It is very hard and smooth when hammered, and the friction will be reduced to almost nothing."—*London Mining Journal.*

VARIETIES OF SPEED.

The velocity of a ship is from 8 to 18 miles an hour; of a race-horse, 29 to 33 miles; of a bird, 50 to 60 miles; of the clouds in a violent hurricane, 80 to 110 miles; of sound, 823 miles; of a cannon-ball (as found by experiment, from 600 to 1000 miles; of the earth round the sun, 68,000 miles—more than 100 times quicker than a cannon ball; of Mercury, 104,000 miles; of light, 8,000,000 miles, passing from the sun to the earth in about 8 minutes, or about a million times swifter than a cannon ball.