ELDER CONSERVATORIUM.

A NEW ORGAN ORDERED. [By Musicus.]

The new organ which the University Council has instructed Mr. J. E. Dodd, of Two-street, to build for the large hall of the Elder Conservatorium promises to form an important addition to the large instruments already existing in Adelaide. It is to contain thirty-two speaking stops distributed over three manuals and pedal. The manual compass CC to C (61 notes) will be the widest yet introduced into South Australia, the most extended up to the present being the Town Hall, which is CC to A (58 notes), while the average Church organ is built with its compass restricted to 56 notes, CC to G. The pedal clavier is to be of the ordinary pattern, containing 30 notes CCC to F. All the recommendations of the Royal College of Organists will be carried out in regard to the measurements and distances of the manuals and pedals, posttions of the stops, and accessories. The tollowing is a complete specification of the instrument:-

Great Organ. Double open diapaopen diapason No. Hohl flute 8 ft. Open dispason No. Stt. Acoline 8 ft. Claribel 8 ft. Flauto traverso .. 4 ft. Viola 8 ft. Mixture.. .. . 3 ranks Principal 4 ft. Cornopean 8 ft. Harmonic flute .. 4 fr. Oboe 8 ft. Fifteenth 2 ft. Vox humana . . . 8 ft. Mixture 3 ranks Posanne 8 It. Choir Organ. Open Viole d'orchestre 8 ft. Dulciana 8 tt. Open diapasen Gerlacht . . . 8 tt. (metal) from Lieblich flute. . . 1 tt. great Clarinet ... 8 ft. Violoncello .. . 8 ft. Couplers. Swell to great Swell to cheir Swell to pedal Great to pedal Choir to great

Choir to pedal

Swell Organ. Lieblich Bourdon 16 ft. 2 8 ft. Detroes. . . . 4 ft.

Pedal Organ.

diapason (wood) , 16 ft. great 16 ft. Accessories. Balanced swell pedal Tremulant to swell by Three pistons to great Three pistons to swell Full swell pedal

Full great pedal

Full organ pedal The organ will contain all the most modern improvements with the exception of electrical appliances, which have not yet been thoroughly tested, and some of Mr. Dodds's own inventions in the method of control, which have been so successfully applied to the large instruments in Kent Town Wesleyan and Clayton Congregational Churches. An improved lever pneumatic action is to be applied to the whole of the great organ and its couplers, while the swell touch will be lightened by means of split pallets and thirty pneumatic valves in the lower portion of the manual. The whole of the steps and thumb pistons are to be actuated by lever pneumatics. The weight of wind for the great, swell, and pedal organs is 4 in., the choir will be placed on a 3-in, pressure, and the pneumatics on 8 in. Mr. Dodd will construct the whole of the organ at his factory in Twin-street, with the exception of the metal pipes, which will be imported from the best English makers. An artistic front in breping with the character of the hall is to be designed by Mr. Dodd, and subjected to the approval of the University authori-

This organ will rank next in size to the Town Hall organ, though certain instruments in North Adelaide contain as many speaking stops, and the North Adelaide Paptist organ has one more register. The Conservatorium instrument will have more loud stops and a larger pedal than either of these, and with the additional weight of wind-4 in, against the 3 in, used in the others-will be much more powerful than they are. Then, as a number of modern stops are to be introduced, and the scheme is much more varied than any at present existing in Adelaide, a larger number of tonal effects will be available. The most important organs yet creeted in the colony may be compared as follows:- In the Town Hall organ we have forty-eight speaking sters and four manuals; the North Ade-Inide Baptist instrument contains thirtythree speaking stops and three manuals; Archer-street Wesleyan, three stops; and St. Peter's Cathedral, three manuals and twenty-nine speaking stops. As before stated the Conservatorium instrument is to possess thirty-two speaking stops. More effective and powerful, however, than these three Church organs are the new instruments in Kent Town Wesleyan Church, two manuals and thirty speaking stops; and Clayton Congregational Church, two manuals and twentyeight speaking stops, after which this latest specimen of the King of Instruments' is to be modelled.

In view of the fact that the Conservatorium organ may be largely used for recitals it is to be regretted that the University authorities are not able to make it slightly larger. Twelve stops on both the great and swell, as at the Town Hall, is quite small enough for a concert instrument; and it is to be hoped that if these are not put in at present the scheme may be enlarged so as to prepare for them at some future time when funds will permit of their being added. A 4-ft, reed in the great and a 16-ft, reed in the swell would make a vast difference in the full effects of the instrument, and a swell-box over the choir, or portion of it, together with a tremplant, would be a valuable addition to that manual, An ideal instrument of this description should have three reeds in the great, 16 ft., 8 ft., and 4 ft., and four reeds on the swell, one 18 it, two of 8 ft, and one of 4 ft, in addition, of course, to the Vox humana.

TELEGRAPHY AND THE CABLE QUESTION.

The subject of wireless telegraphy has become thoroughly popular; and, as a writer in the "Quarterly Review" has remarked, this result is largely due to the part taken by the daily Press in discussing the topic in its general aspects. Professor Bragg proposes to give three lectures on this theme during the winter in connection with the University extension scheme, and these addresses will probably be amougst the most numerously attended of the series. A scientist recently asserted in the "Edinburgh Review" that "the addition to the resources of civilized mankind made by wireless telegraphy is of a subordinate if of an extremely significant kind:" yet the same critic immediately afterwards admitted that "in the exigencies of war, above all, it might prove of vital consequence." Surely the recognition of this fact, with the proved usefulness of the system in signalling to and from coastal lights and stations, may be accounted at least a fair record of achievement considering the short time during which wireless telegraphy has been before the public. From the strategic standpoint the whole matter, as we pointed out recently in reference to the proposed Pacific cable. is of peculiar interest to Australia. Take away the "all-red" argument from the brief which has been so ably compiled by advocates of the Pacific Cable scheme, and what is left? We find a writer, whose expectation of the applications of wireless telegraphy are certainly by no means over-sauguine, forecasting that "in time of war the hostile raids of wirecutters would, by its means, be rendered comparatively innocuous." If from the purely defensive standpoint the colonies had to decide which object it would be better for them to subscribe towardsthe Pacific Cable, or the establishment of wireless communication between Northern Australia and India via the Archipelago-the latter ought undoubtedly to command the greater support. At its landing stations on isolated islands in the Pacific the cable would be peculiarly liable to suffer from an enemy's wirecutting operations. In out-of-the-way places any foreign Power may challenge Britannia's rule over the waves of the sea, but when waves in the ether have to be dealt with the conditions are entirely changed.

The distance through which wireless telegraphy is being applied is rapidly being extended, as a result of experiments. In the early part of April Signor Marconi dispatched messages across the English Channel from the South Foreland to Boulegne, and his . success was so marked that he is now completing permanent stations on the cliffs at Newhaven and Dieppe, which are distant from one another sixtyfour miles. Supposing that the art of submarine telegraphy had never been discovered, or that all the cables con neeting Australia with the rest of the world were destroyed, it might be possible to send messages through the air all the way to England, the distances between the various points of land to the north of Australia being all such as could probably be bridged by the wireless telegraph. A powerful Company is being organized with the object of securing patent rights in some of the best improvements which are likely to facilitate the application of wireless telegraphy to useful purposes, and we may expect that keen eyes will now be directed towards those parts of the world in which the Hertzlan ether waves may possibly be turned into hard cash. Accordingly there is quite an appreciable probability that, so far as Australia is concerned, the commercial as well as the strategic aspect of the new telegraphy may be brought into prominence. A committee of members of the House of Commons was recently formed, at the in stigation of Mr. Henniker Heaton, to promote the cheapening of inlegraphic rates between various parts of the British Empire. At the meeting which appointed this body Mr. Heaton mentioned that telegrams can be sent from London to Vancouver - 6,000 miles-for Is. 6d. a word, while the rate from Loudon to any part of India is is, a word. He showed also that,

as a rule, cable rates are greatly in excess of charges for telegraphing by land lines. We are not now concerned with the actual chances of financial success in any business enterprise based upon a scheme for sending messages from island to island, and thus connecting all the pieces of land line between Australia and Europe, What we desire to emphasize is the extreme degree of likelihood that, if wireless telegraphy should progress in the next year or two as rapidly as it has in the past few months, the feat indicated will at least be attempted, and that a new element of competition with existing cables will thus be introduced quite independently of the Pacific scheme.

One of the neatest contrivances de .. vised by Marconi this year is the electric fog bell, which is fitted on board a steamer to give warning of the proximity of land during thick weather. The idea is that some of the lighthouses and other stations on the great highways of traffic should be supplied with vibrators kept constantly in motion, sending out Hertzian waves into space, while each large steamer should have a receiver with a long funnel-like mouth directed right ahead. When the electric waves have a free course along this funnel they are sufficiently strong to ring the alarum bell, but

at other times they make no impression. In this way directly a ship is heading towards any dangerous spot she is warned, no matter how foggy the weather may be. Perhaps by an application of the principle of the telephone the steersman may be enabled to ascertain not only the direction in which danger exists, but also its approximate distance. Signalling between ships and stations on shore has already been successfully done by French naval officers on board the gunboat Isls, the messages having been dispatched from the middle of the Channel to the South Foreland, to the East Goodwin Lighthouse, and to Boulogne. By means of a "concentrator" similar to the funnel apparatus already mentioned it has been found possible within certain limits to dispatch messages to their destination without allowing parties for whom they were not intended to pick up the information conveyed. This precaution has been elaborately provided for by the system of "synchronisers" analogous to that of the keys by which cypher messages are read; but a simple method of attaining the same end will be very acceptable to future users of the wireless telegraph. It is bad enough sometimes for telephone subscribers to have their words overheard, and serious consequences have occasionally resulted from an "aside" muttered by an incautious speaker, or om a word or two from the telephone

seeiver caught up by some very quick mearer. It is in devices for preventing leakage of information that the principal field for inventiveness now lies open. Until this requirement is fully met any developments on a commercial scale, unless for maritime purposes, are not very likely. In contemplation of the results which have followed from Morse's little experiments upon half a mile of wire in 1836, it would be rash for any man to say that the wireless system may not soon demonstrate its marvellous utility in several surprising directions. Indeed, even now applause would be secured by any one who should tell a mixed audience that there is really something new under the sun. Later on, some Egyptologist may unearth in longhidden rains records proving that the ancients had forgotten more than we know about wireless telegraphy and everything else; but let us enjoy our Sattering illusion as long as we can.

Refiolds. 12h June. 1890 THE ELDER CONSERVATORIUM.

The building of the Elder Conservatorium of Music is showing up well now, good progress having been made since Christman with the walls, which are now almost ready for the root. Mr. Walter C. Torode is meing his Stirling West free-tone in constructing the bulk of the work, and the substantial and tasteful appearance argues well! for the builder's selection of material, Five teams have been continually engaged in carting from the quarry at Stirling West, and thousands of tons have been brought down. The work has been in progress about nine months, and since the new year that walls have been raised over 30 in above ground level. Carpenters are already at work propaging the open hammer-beam root, watch will have a span of 30 ft, in the clear. A large number of men are employed on the building, the average from the