

less than one-half, from 13,200 around the Straits of Magellan to 6,700 via the Isthmus.

Honolulu cannot but play a vitally important part in any war in which the United States takes part, and should the struggle be with an Eastern Power, then Honolulu will be the key position, and its capture would almost entirely determine the result.

The fortification of Honolulu is not without significance to Australia and New Zealand. The Commonwealth and Dominion have recently adopted compulsory military training for their youth in order that their own homes can be defended from a possible enemy. Australia is building a navy with the same end in view. Both countries have decided to preserve their territories to the white race. The arming of the southern lands and the fortress and naval base at Diamond Head and Pearl Harbour have become realities, because a fear exists that there may be danger coming from the East where the Oriental nations are now rising with startling suddenness to the rank of first-class powers.

The interests of Australia, New Zealand, and the United States in the Pacific are identical. The defeat of the United States would have a paralysing effect upon Australia and New Zealand, and the capture of the Commonwealth by China would create a complex problem for America.

President Taft, in his history-making memoranda to Sir Edward Grey, the British Foreign Minister, on the subject of an unlimited arbitration treaty between the two nations, urged the sanity and wisdom of settling disputes by arbitration.

Individual honour is now satisfied without resorting to swords and revolvers, and why not national honour in the same way.

It is ardently hoped that before many years have passed away, the war zeal will be laid aside, and the battle flag furled, and an era of peace and international trust ushered in, which will be permanent and lasting.

For the present, the equipment of Honolulu, as the strategic point of naval and military power, for the most powerful white race bordering the Pacific is a fact of profound importance to Australia and New Zealand.

[NOTE.—Since the above article was written it was reported in the United States Congress at Washington that there were 35,000 retired Japanese soldiers in Hawaii ready at any moment to assist in winning that territory for their country should the opportunity arise. The United States War Department have decided to increase their garrison at Honolulu by the immediate despatch of five regiments of infantry, each of twelve companies, one regiment of cavalry, one regiment of field artillery, eight companies of coast artillery, one company engineers, and one of signal corps.]

Preserving Hailstones.

The peculiar formation of hailstones and the probable conditions of their production have long been matters of much interest to scientists. A thorough study of them, it is believed, might throw much light on various meteorological phenomena, especially in regard to air-currents, changes of temperature and of pressure, etc., in the upper strata of the atmosphere. A comparison of them with the "ice flowers" and snow crystals or stars which Tyndall and other prominent scientists have found so fruitful a field of investigation might yield important results. Heretofore, however, the comparative rarity of their occurrence and the great rapidity with which they melt, has offered obstacles to this. But Prof. Boris Weinberg, of Tomsk, Siberia, has just perfected an apparatus as we learn from Les Annales, which is expected to obviate these difficulties. He will gather the hailstones as opportunity offers and preserve them by plunging them in a liquid of about the same density contained in a double-walled receptacle like a superior ice cream freezer, but "packed" with a mixture of ice and sulphate of copper. As needed for study the stones can be removed, sliced in extremely thin sections and photographed by a polarizing microscope or auto-chromatic plates, as is done with anatomical preparations.

The Modernisation of Palestine.

Rapid Development of the Holy Land — Transportation Concessions and Water Supply—Tramways and Telephones—Mecca to be joined up with Damascus—To Mecca by Rail from Paris

By HAROLD J. SHEPSTONE.

VERY rapidly, and with so little advertising that the rest of the world scarcely realises it, the modernisation of Palestine has been going on ever since the triumph of the Young Turkish Party over Abdul Hamid. In political, educational, and particularly in economic reforms, there has been a great deal of progress. Important railway and transportation concessions have been

miles of desert between Medina and Mecca.

Starting from Damascus this line runs almost due south through wild and sterile country for more than 820 miles to Medina, the burial-place of Mohammed. It is principally used for carrying Mohammedan pilgrims. At many of its more important stations one can now send telegrams in any European language to all parts of the world. Until



ONE OF THE OLD WELLS AT BEERSHEBA.

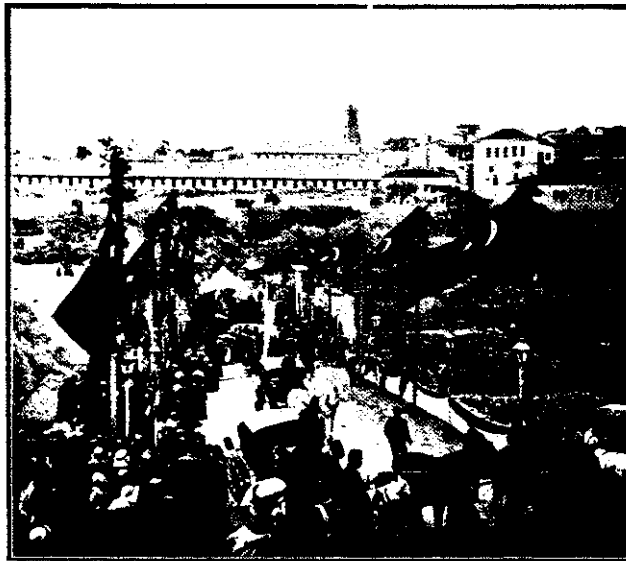
Note the grooves in the stone worn by bucket ropes.

the French, and which will finally revert to Turkey. This line is fifty-five miles in length, and the journey is a particularly interesting one, as one passes through the scenes of many Old Testament events, such as the birthplace of Samson, Mizpeh (where the Children of Israel, from Dan to Beersheba, were called together several times, and where Saul was anointed king), the spot where the Ark rested, and many other sacred places.

Then followed one from Beyrouth, on the coast, to Damascus, also the work of the French. Crossing as it does the Lebanon regions, the line passes through some really beautiful scenery. The distance by rail between Beyrouth and Damascus is ninety-one miles, and the railway is a narrow gauge, and for climbing the mountainous portions (about twenty miles) a cog-wheel-and-rack system is employed.

Of more recent date is the Turkish line from Haifa, also on the coast, round the southern end of the Sea of Galilee to Damascus. This line owes its inception to the Mecca project. When the latter work was put in hand all materials for its construction had to be carried from Beyrouth to Damascus by the French railway. The rates charged the Turkish Government by this line were so high, however, that it was decided to build this side line, giving them a direct communication with a seaport. The gauge is 4 1/2 ft., and it was erected by English engineers.

As the track runs across the Province of Galilee and touches many places mentioned in the New Testament, it is naturally much patronised by tourists, and from its inception has been a financial success. Skirting along the foot of Mount Carmel the track runs to Afuleh, close to Nazareth. It was originally intended to continue the rails round the western shores of the lake. If this had been done Tiberias, Magdala, and Capernaum would have been connected with the Mediterranean by rail. The engineers, however, finally decided to run the iron road round the southern end of the lake. The track passes through Semakh, at the southern extremity of



THE OPENING OF THE WATERWORKS AT JERUSALEM.

The Sir Moses Almonstere Almonshouses at the back. The Pool of Gihon is below the causeway.

granted, while Jerusalem, Jericho, and Palestine's newest city, Beersheba, have been given a much-needed water supply.

Damascus, too, has recently had her water-supply greatly improved, and is the first city in Bible lands to have an electric tramway, and in this particular Beyrouth is following suit. It is hoped, too, that Jerusalem will in the near future boast of a tramway service.

Indeed in every department of commercial enterprise and activity modern methods are being rapidly brought into vogue. The question of drainage of the principal streets of Jerusalem has recently received attention, and, like Constantinople, the Holy City has got rid of her dogs, and her pavements and streets are cleaned by the new sanitary department of the Government.

Then the Turkish authorities recently granted a concession to several English and American companies for the construction and exclusive operation of telephones both in the Turkish capital and also in Jerusalem. Indeed, as Constantinople becomes more modernised and adopts Western methods so does Jerusalem.

Perhaps it is in transportation facilities and in water-supply that the development is most marked. One has only to add that last year plans were submitted to the Turkish Parliament for the construction of no fewer than 1,500 miles of railway, with mineral and oil-rights in the Asiatic dominions of the Sultan, to show the rapid development now going on in this part of the world. The lines of the Hedjaz railway are to be carried with all speed across the 295

written recently they had to be handed in either in Turkish or Arabic. Tourists visiting Palestine now make use of this line for reaching the rock-hewn city of Petra, on the edge of the great Arabian desert. It means a saving of at least eight days in the journey.

This is, of course, by no means the only railway in Palestine. The first to be opened was that which connects the seaport of Jaffa with Jerusalem, built by



ELISHA'S FOUNTAIN AND THE PLAIN OF JERUHO.

This is the fountain healed by the prophet. Now its waters are piped into modern Jericho.