We have received an interesting little booklet from the Silent Electric Clock Company, of 192 Goswell Road, with which is embodied the firm's latest catalogue and price-list. This booklet is worthy of notice, for it differs widely from the ordinary run of price-lists, inasmuch as it contains a complete description of this firm's system, a system which is based upon more than sixteen years' experience of a class of apparatus which the Silent Electric Clock Company has apparently brought to a wonderful degree of perfection, judging from the list of more than eighty recent installations which have been supplied, no doubt much to the satisfaction of the users, amongst which we notice several British, colonial, and foreign Government departments, home municipalities, schools, and railway companies. It is interesting to observe that every department of time-keeping is provided for: large and small clocks; turret clocks; clocks for use on shipboard, with automatic adjustments for diurnal longitudinal correction; clocks arranged to strike and chime electrically, both for household as well as for public installations; and also for ringing bells according to variable programmes; high-grade astronomical clocks, and master clocks arranged for automatic synchronisation by means of the daily signal distributed by the Post Office Telegraph Department from Greenwich Observatory. Any of our readers interested in electric clock systems should certainly send an inquiry to this firm.

During the spring and summer of 1910 the United States Naval Wireless Laboratory carried out an extensive series of experiments on the range of communication by wireless telegraphy between two cruisers and the Brant Rock station, near Boston. An account of the work done and the results obtained is given by Mr. L. W. Austin in the October (1911) number of the Bulletin of the Bureau of Standards. The antenna of the Brant Rock station was 420 feet high, and of the umbrella type; those of the cruisers were 116 feet, and of the flat top type. In each case the coupling between closed circuit and antennæ was loose enough to cause only one wave to be emitted. Over salt water the received currents are proportional to the sending currents and to the product of the heights of sending and receiving antennæ divided by their distance apart and by the wave-length used. In addition, they are subject to absorption, which in the daytime is expressed by multiplying the above by e^{-ad}, where d is the distance and a a constant the value of which varies inversely as the square root of the wave-length. During the night the absorption is too irregular to be represented by any formula. The above statements have been tested over the following ranges:—sending currents, 7 to 30 amperes; antennæ heights, 37 to 130 feet; wave-lengths, 300 to 3750 metres; distances up to 1000 miles.

Engineering for December 29, 1911, contains an illustrated description of a floating crane of exceptional size which is now in use at the Austrian Naval Dockyard, Pola, on the Adriatic. The crane is designed to deal with the heaviest weights in ship construction, and also, on an emergency, to raise sunken submarines. According to the specification, the crane had to be provided with two crabs, each having a lifting capacity of 120 tons, the crabs being so designed that both could be used simultaneously, especially for the lifting of submerged loads, in which case the rear crab has to work at a maximum distance of 5 feet from a line corresponding with the front edge of the pontoon, the front crab being close against it. Arrangements are made whereby the submarine can be raised sufficiently out of the water for rescuing the crew through the conning tower, when the necessary steps could be taken with more leisure for salving the submarine itself. The crane can be propelled afloat at a speed of about 3·4 knots. Under test, each crab was made to carry a load of 150 tons, the rear crab being at a distance of 5 feet, and the front crab at a distance of 47 feet 7 inches, from a line corresponding with the front edge of the pontoon.

In chapter xxxix. of his "Study of Bird Flight"—which is now appearing serially in the pages of *Flight*—Dr. E. H. Hankin discusses the cause of soaring flight. Two ancient theories are examined and rejected, *i.e.* that the soaring bird takes advantage of (1) ascending currents reflected upward from the walls of high buildings, &c.; (2) ascending currents or eddies caused by heat; for the reason, in the first instance, of personal observation to the contrary in the case of heavy birds, and, in the second, that soaring can in some conditions be impossible in the presence of heat eddies as well as in their absence, and *vice versa*. "There is no evidence whatever," says Dr. Hankin, "in favour of the view that the energy of soaring flight is derived from the kinetic energy of air in movement independently of the bird's wing." The conclusion drawn is that the energy used in soaring is stored up in the air in potential form, for which he coins the word "ergaer." On the question of the composition and decomposition of "ergaer," our author admits he knows nothing, but defends his theory as entirely scientific, merely advancing the opinion that "ergaer" is stored sun energy, and that "the air under the wing of a soaring bird is undergoing a change of the nature of a sort of continuous explosion." Later in the development of the idea we are asked to suppose a bird gliding into a patch of soarable air with its wings at full camber. In these conditions, the "pull" would no longer act at the centre of gravity and would no longer be the momentum, but would change to the tractive effect of soarable air on the cambered wing, and so would act on a level with the wings.

A copy of the January issue of his catalogue of second-hand instruments (No. 49) has been received from Mr. C. Baker, 244 High Holborn, London. The list contains particulars of nearly 2000 items, the majority of which will interest the astronomer and the microscopist. The instruments are guaranteed to be in adjustment, and are for sale or hire.

The twenty-eighth annual issue of "The Year-book of the Scientific and Learned Societies of Great Britain and Ireland" has now been issued by Messrs. Charles Griffin and Co., Ltd. This useful work of reference is a record, compiled from official sources, of the work done in science, literature, and art during the session 1910–11 by numerous societies and Government institutions. It is to be regretted that the summary of the proceedings of the British Association, given on pp. 10 to 23, refers to the Sheffield meeting held in September, 1910, and not to the Portsmouth meeting of last year. Since the whole of the titles of papers, reports, &c., presented at the Portsmouth meeting were available before the middle of September last, we suggest they might with advantage have been included, in addition to those relating to the 1910 meeting.

Errata.—The paper on "Momentum in Evolution" published in last week's Nature was by Prof. Dendy, and not Denny, as printed on p. 301.—We are asked to state that on p. 296, col. one, line ten, "a rubber ram" should be "an iron ram." The former words were given in the manuscript supplied to us, and were passed in proof by our contributor.