ing the other half by a semi-cylinder of paper fiber bound upon the shaft. Electrical energy is supplied by a small dynamo, giving a current of about one ampere in an E. M. F. of about 15 volts. This, in the apparatus under discussion, is “put upon the shelf” near by, a belt from a neighboring pulley giving it a speed of some 1,200 revolutions per minute.

The hands of the minute dial (2) are driven by the spring and train of a Seth Thomas eight-day clock. The automatic release (4) consists of a shunted electro-magnet, the circuit through it being closed by the clock just as it reaches the minute. When the armature is drawn up, a 16-toothed wheel moves forward one step, bringing an 8-toothed wheel in contact with a platinum brush, thus closing the circuit through the magnet of the recording-dial. When the minute is completed, the smaller wheel is again moved through half a tooth, and the circuit through the recording-dial is broken. By moving a small switch, this breaking is delayed as long as desired, thus recording an average of the revolutions for a number of minutes.

The writer understands that Messrs. Stevens and Wescott, the patentees, would be willing to place the apparatus, at their own expense, in a few reliable places for the purpose of introducing it to public notice. It is being continually referred to at the station, where it is in great favor, to determine what the different lines of shafting are doing, detecting slipping of belts, and many other causes of irregular speed. Should the shaft contact fail, by any chance, giving an inaccurate count of the revolutions, it would be immediately detected by the uncertain and irregular movement of the ratchet which actuates the recording-dial, the rhythmic click of the instrument being proof positive that its records may be trusted as a true history.

A. T. C.

A Trip to Gay Head.

A PARTY of five, of whom I was one, passed a few weeks at Vineyard Haven, last summer, and while there we were urged by friends to go on an excursion to Gay Head, to see the famous cliffs. The week before, our friends had taken the same excursion; and, as it was very rough, nearly all the party were sick, and I think that they had a secret hope that we would share their fate. As it happened, we had no chance to test our seamanship, for the day was one of those clear and calm ones, with scarcely a ripple on the water.

Gay Head is about twenty miles from Vineyard Haven, at the extreme westerly end of the island. It is rather a tiresome journey, as the coast-line is very barren,—a house here and there, or a clump of trees, being all there is to relieve the monotony. About a mile from the landing, we were shown the spot where the “City of Columbus” was wrecked; and a little way off, that on which the “Gate City” was lost a week before. This latter event we remember only too well, from the fact that for nearly two weeks after the accident we were fed at our “ranch” on watermelons picked up around the wreck.

At the landing we were surrounded by a group of the Gay Head Indians, who were endeavoring to sell specimens of clay and pottery and other fancy articles which they had made. About five of them had ox-carts, in which to take the passengers to a lighthouse at the summit of the cliff. Although great inducements were made to ride, in the shape of a two-wheeled cart, with a hard-pine board for a seat, drawn by two powerful oxen, we declined them all, and set out on foot. On top of the hill on which the lighthouse stood, we got a view of the whole bay and a large part of the island, and in the distance we could see the Massachusetts shore.

Up to this time we had not seen the cliffs, but now looking over the edge of the hill we saw them stretched out at our feet, extending down to the water’s edge—gray, blue, red, white, yellow, and in fact almost every color. Truly, it was a wonderful sight, and one well worth seeing.

After we had finished our dinner we went down on to the beach below, and there a very curious sight met our eyes. Hand-bills had