

and above all, keeps correct time. It attracted the attention of the well-known Professor of Physics at the University of St. Petersburg, Herr Ohwolson (son of the renowned Orientalist of that Committee of *Savants* at the Ministry of the Interior has written an article on the subject in the *Novosti*, from which I extract the following particulars: 'In its remarkable simplicity this invention can only be compared with the Jablochkoff system of electric lighting. The watches are without any springs and consist solely of two wheels. Besides being true they have the advantage of the second hand moving in single momentary leaps, as is usually the case only in very costly watches, and which is of the utmost utility for astronomical observations. These watches can also set in motion a certain number of watches of the same construction, so that they all keep exact time. The invention has convinced me that the watches can be used for the purpose of telegraphy. After naming several other advantages, Professor Ohwolson describes the invention as a wonder which will cause an entire revolution in the manufacture of watches. Herr Schigal is the son of a Jewish watchmaker in Berditschew, where he commenced his studies at the Realschule. He subsequently left for Kieff in order to enter the Gymnasium, but the Anti-Jewish outrages which raged there two years ago, aroused in him a determination as it did in so many other Jewish students, to leave Russia and seek a new home in another land. But before quitting the country he resolved to thoroughly master his father's profession, and with this object in view he returned home. There, besides learning how to make watches, he occupied himself with the study of physics, and especially of electricity, and he turned his attention to the desirability of bringing the latter into relations with his occupation. This kept him engaged for about two years, until he hit upon the idea of his invention, which took him three months to work out and perfect. Several prominent persons have evinced the utmost interest in him and have made splendid offers to enter into business connections with him. From far and near, especially from military circles, he received telegrams congratulating him on having conferred so great an honor on his fatherland, the senders evidently being unaware that he is a Jew. As I have al-

ready stated, he has concluded a contract on most favorable terms with the well-known Cræsus, M. Paschkow, and as he is still a minor, his elder brother has arrived here in order to complete the necessary legal formalities for the constitution of the firm. The Governor of St. Petersburg has granted the young inventor the right of residence in that city until he obtains this right, *eo ipso*, as an artisan."

COSTLY CLOCKS.

The Philadelphia *Record* publishes an interesting article on the subject of quaint clocks, and how Mr. G. W. Childs, the distinguished philanthropist, takes note of time to the value of some \$90,000. The writer says that when General Grant returned to Philadelphia after his great tour around the world, he brought to his friend, Mr. Geo. W. Childs, a large hall clock, which he designed as a companion piece to two remarkable time-keepers then in Mr. Child's possession—one had ticked for more than two centuries in an Austrian cloister, and had rung out the signal which daily roused the monks to their devotions; the other is the most complex and the most complete piece of time-measuring machinery that can be found in America. To look at these curiosities a reporter visited the private office of the *Ledger* publisher, on Sixth street, below Chestnut. The apartment is patterned somewhat after a room in Coombe Abbey, Warwickshire, which one of its lords had fitted up for the reception of Queen Elizabeth. The quaint open fireplace, high wainscoting, the plaster ornaments of the ceiling, the Flemish stamped leather for wall papering, and the tile flooring are in perfect accord with the style and traditions of these massive timepieces.

Meantime a glance around the room revealed clocks in every place where such heavy articles could be put. On Mr. Child's writing desk were three odd looking timepieces. On the top was a clock made with lapis lazuli case, one foot high and ten inches broad. Stone as it is, the clock case is worth more than its weight in solid gold, and is the highest priced article in the room.

Immediately below is an odd looking ornament, consisting of two uprights supporting what at first glance appears to be a ball, but which is a Japanese clock, the dial completely covering the front

half of the sphere, and curious hands pointing out Japanese scrawls to denote the hours. The works inside look like a cradle. There is a third clock on Mr. Child's desk, an ornamental steeple clock, which is set in a stand, that indicates the day and date of the month.

Over the old fashioned fireplace, where the grate is suspended by heavy iron crane, there is a basso-relievo, wherein a winged Cupid is depicted bearing an hour-glass, to typify the flight of time, while on the mantle immediately overhead is a bronze and Marble French clock of beautiful design and exquisite finish, and of such fine workmanship that it does not vary hardly more than a minute in a year. It has a perpetual calendar attachment, at a cost over \$800.

On either side of the mantle, under life-size pictures of Messrs. Childs and Drexel, are clocks marking two periods in French history. One has a case of tortoise shell inlaid with bronze scroll work, such as was fashionable in the time of Louis XIV.; the other is in the Rococo style, which was popular during the time of Henry IV. The bronze case, nearly three feet high, is profuse in decoration of a debased style that succeeded the first revival of Italian architecture.

Above a huge ebony cabinet filled with curios of every variety, stands an antique English clock, with square ebony case. It is very plain and very old, the seconds being measured by a verge escapement, which was supplanted more than 200 years ago by the pendulum.

Another expensive clock on the walls has a case of malachite ornamented with bronze. This is Russian work. The clock stands on a neat bracket of malachite and bronze, that was made in this country to Mr. Child's order, at a cost of \$250.

The glance around the room from desk, and mantle, and bracket, and cabinet, now strikes three hall clocks—the dearest treasures of the collector. The "convent" clock, which came from an Austrian cloister, is over 200 years old, is roughly made, and is exceedingly crude in its mechanism.

General Grant's present, sometimes known as the Grant clock, and often named the Klingenburg clock (after its maker, John Klingenburg, of Amsterdam), is of great value. But, precious as are these two time-keepers, they are commonplace as compared with the Rittenhouse clock, which occupied an hon-