

men, still exists among the diminishing relics of the past. Nor is it to be supposed that this art was entirely unknown to more ancient nations. In India, from the earliest times, a mode of releasing the crystal from its native husk was employed, which probably differed less in principle than in application from that now used in London and Amsterdam. The gem-engravers of antiquity not only worked extensively with the diamond-point, but in some cases engraved the "indomitable" stone itself. In the Duke of Bedford's collection, for instance, is a diamond engraved with the head of Posidonius, and one bearing a portrait of a Roman emperor was to be seen at the Paris Exhibition, 1878. It is questionable that Berquem first introduced the method of cutting diamonds into regular facets, and employed for the purpose the wheel, with the powder of the gem itself, precisely after the modern fashion. In 1475, he made his first experiment of the "perfect cut" on three rough stones sent him by Charles the Bold, who was famed for his magnificence in jewels. all three were worn by the unfortunate Duke of Burgundy, probably with some regard to safety as to splendor, in his disastrous battles with the Swiss, but the talismanic value had gone out of them, so they were lost with the fortune of their owner, and after many singular adventures, found their way each to the treasury of a separate foreign potentate. The most celebrated of these was the "Sancy" diamond, a fine stone of 58½ carats. It was picked up on the field of Nancy by a Swiss soldier, who sold it for a florin to a priest; unsuspectingly redispensed of by him for a scarcely larger sum, and transported by the currents of chance of trade to Portugal, where it figured in 1489, among the crown-jewels of the unlucky Don Antonio. This monarch in difficulties first pledged, and then sold it for 100,000 livres to Harlay de Sancy, French nobleman, whose descendant, Nicolas de Sancy, was induced to place the gem in pawn for relief of a pressing exigency of the crown in the time of Henri III. For this purpose it was entrusted to a servant to be carried to a jeweler at Metz; but neither servant nor jewel reached their destination, and the conclusion seemed inevitable that the temptation had proved too strong for the man's fidelity. DeSancy alone never wavered in his reliance on the devotion of his dependent, and maintained

that only with his life would he have separated with the precious charge committed to him. And in fact, after some further search had been made, the murdered body of the messenger was found by the roadside. It was opened, and the diamond was discovered in the stomach! Thus, by a last and despairing expedient of fidelity, this nameless hero baffled his foes at the very instant of succumbing to them, and left to posterity the memory of an action brighter than the gem whose safety it secured. Through some unknown channel the "Sancy" diamond came into the possession of James II. of England shared his exile, and was disposed of by him "for a consideration" to his royal host. The "well-beloved" Louis wore it in the *agrafe* of his hat at his coronation, and it rested quietly in the treasury at the Tuileries until the troubles of the Revolution once more set it in circulation it found its way to Spain, was sold by Godoy to Prince Demidoff, and purchased from him by Sir Jamsetjee Jejeebhoy for the sum of 200,000 florins. And here or the present its story ends — *Frasers' Magazine*.

THE LARGEST CLOCK IN THE WORLD

The great and largest clock in the world was contracted for in the year of our Lord 1847, and started running in 1859, and started striking in July of the same year, although the construction was nearly completed in 1854 by the first Mr. Dent, a big name among watch and clock makers at the present day. The architect was Sir Edmund Beckett Denison, who as a designer in horology, has ably proved himself on the top perch.

The clock in its general design is of that kind known as the platform kind, and its plates measure 16 feet over all; the ends are built into the wall, while the bracing resembles the trussing of our bridges. There are three trains of wheels: the time train in centre; hour strike train on the left; quarter train on the right. The main wheels are 40 inches in diameter, while the cam lifters for hammer tails are 38 in diameter. There is only one cam lifter on main hour wheel, with 10 cams and 8½ inch faces of steel. In this connection the above strength is necessary on account of the weight of the hammer to be raised, (420 lbs.) to strike the great 15-ton bell. The quarter chime hammers are much lighter being in proportion to the bells to be struck

by them. There are four, and they weigh from three tons 18 cwt, down to one ton and one cwt. The diameter of hoop wheel is 80 inches, and the flys are in the usual proportion, but as the flys are driven with one pair of wheels to throw them on end and reduce friction, the flys proper resemble a large sized barn door, and the way they make the wind blow is awful. I will now describe the time train. The main wheel is 28 inches diameter, while the barrel is 16 inches, with a capacity for two feet of line. Great wheel has 180 teeth; centre 120; third 120; with pinions of 12, 16 and 9. This brings me down to the escapement, which is the far-famed one—the gravity. This one is called the three-legged, and is formed of two wheels with three teeth each on same arbor, with space between, and in this space comes the lifting pallets, which are driven by the weight, and as soon as the pendulum swings against the lifted pallet it is released, thus allowing the pallet or arm to propel the pendulum on its opposite passage, where the same action takes place and a corresponding impulse is given. This escapement takes away all imperfection of trains, as the weight of pallet arm alone gives impulse. This clock beats two seconds; length of pendulum 18 084-1000 feet from suspension to line; of oscillation; weight of ball 685 lbs.; length of suspension spring 5 inches, 3 inches wide and 1-60 of an inch thick; glass used in dials, 2½ tons, and with iron cost £5,334. Going part takes 20 minutes to wind; depth of well for weights 174 feet; clock frame 4 feet seven inches wide; dials 22½ feet diameter; weight of minute hand 2 cwt.; length 14 feet; the pendulum rod is compensating, with an appliance for regulating. The cost of this clock, in addition to dials and hands as above noted, was a little under £8,400, making the clock when finished cost the sum of £8,734. The writer of this will never forget the beautiful sounds of the bells which the clock gives out when striking. The large bell is heard ten miles off, and the small ones four to five. This clock is reported giving an error of only 90 seconds per annum; but the appliance for regulating by making it faster or slower as our city observatory does, debars us from forming an idea what it might be if left alone for one year.—W. A. HENDRIE, in the *Watchmaker and Metal-worker*.