Watches, strictly taken, are all ſuch movements as ſhow the parts of time ; as clocks are ſuch as publiſh it, by lin­king on a bell, &c. But commonly the name *watch* is ap­propriated to ſuch as are carried in the pocket ; and *clock* to the large movements, whether they strike the hour or not. See Clock.

The invention of ſpring or pocket-watches belongs to the preſent age. It is true, we find mention made of a watch preſented to Charles V. in the hiſtory of that prince : but this, in all probability, was no more than a kind of clock to be ſet on a table, ſome reſemblance whereof we have still remaining in the ancient pieces made before the year 1670. There was alſo a story of a watch having been diſcovered in Scotland belonging to king Robert Bruce ; but this we be­lieve has turned out altogether apocryphal. The glory of this very uſeful invention lies between Dr Hooke and Μ. Huyghens ; but to which of them it properly belongs, has been greatly diſputed ; the Engliſh aſcribing it to the form­er, and the French, Dutch, &c. to the latter. Mr Derham, in his Artificial Clockmaker, says roundly, that Dr Hooke was the inventor ; and adds, that he contrived various ways of regulation. One way was with a loadstone : Another with a tender straight ſpring, one end whereof played back­wards and forwards with the balance ; ſo that the balance was to the ſpring as the bob to a pendulum, and the ſpring as the rod thereof : A third method was with two balances, of which there were divers sorts ; ſome having a ſpiral ſpring to the balance for a regulator, and others without. But the way that prevailed, and which continues in mode, was with one balance, and one ſpring running round the up­per part of the verge thereof : Though this has a diſadvantage, which thoſe with two ſprings, &c. were free from ; in that a ſudden jerk, or confused ſhake, will alter its vibrations, and put it in an unuſual hurry.

The time of theſe inventions was about the year 1658 ; as appears, among other evidences, from an inſcription on one of the double balance watches preſented to king Charles II. viz. Rob. Hooke *inven.* 1658. T. Tompion *fecit,* 1675. The invention presently got into reputation, both at home and abroad ; and two of them were ſent for by the dauphin of France. Soon after this, Μ. Huygens’s watch with a ſpiral ſpring got abroad, and made a great noise in England, as if the longitude could be found by it. It is certain, however, that his invention was later than the year 1673, when his book *de Horol. Oscillat. was* publiſhed; where­in he has not one word of this, though he has of several other contrivances in the same way.

One of theſe the lord Brouncker ſent for out of France, where Μ. Huygens had got a patent for them. This watch agreed with Dr Hooke’s in the application of the ſpring to the balance ; only Μ. Huygens’s had a longer ſpiral ſpring, and the pulſes and beats were much slower. The balance, instead of turning quite round, as Dr Hooke’s, turns ſeveral rounds every vibration.

Mr Derham ſuggests, that he has reaſon to doubt Μ. Huygens’s fancy first was ſet to work by ſome intelligence he might have of Dr Hooke’s invention from Mr Olden­burg, or ſome other of his correſpondents in England ; and this, notwithstanding Mr Oldenſworth’s attempt to vindi­cate himſelf in the Philoſophical Tranſactions, appears to be the truth @@(a). Huygens invented divers other kinds of watches, ſome of them without any string or chain at all; which he called, particularly, *pendulum watches.*

*Striking Watches* are ſuch as, besides the proper watch­part for meaſuring of time, have a clock-part for striking the hours, &c.

*Repeating Watches,* are ſuch as by pulling a firing, &c. repeat the hour, quarter, or minute, at any time of the day

@@@(a) To expect perfection in a work of this extent would be unreaſonable, and we trust to the candour of our readers for their acceptance of our best endeavours : we hold ourselves much obliged to them for their communications *of* every remark which may enable us to render the Encyclopædia Britannica more worthy of that most encouraging reception which it has met with from the Public. To the regular ſeries of articles, the preſent Editor had once reaſon to believe that a Supplement was to be annexed, which ſhould include not only thoſe additions which have been made to the circle of the ſciences during the progreſs of the work, but likewiſe ſuch articles as he or his predecessor had, through their un­remitting occupation or their ignorance, ſuffered to escape their notice. In that Supplement he would have corrected all such errors or miſtakes in the work as might have been diſcovered by himſelf or pointed out to him by his Correſpondents. But he is no Proprietor, and cannot announce the publication of a Supplement but as an event of great uncertainty. He is therefore much obliged to his highly reſpected friend and correſpondent who has put it in his power at preſent to do justice to the memory of Dr Robert Hooke ; one of the greatest ornaments of the Royal Society of London during the time of its infant state and juvenile vigour, and one of the most extensive and inventive geniuſes that the world has ever ſeen.

In the article Hautefeuille, we aſcribe to that author the invention of the regulating or balance ſpring of a watch, by which its motion is made as truly equable as by a pendulum. This is verified by the watches of Harriſon, Arnold, and others, which do not deviate from equable motion above one second in ſeveral days. That the importance of this is acknowledged by the intelligent Public , is evident from the serious and repeated deliberations of the Britiſh Senate, and the high rewards which it has given to the makers of ſuch watches ; and we trust that this will appear to ſuch of our readers as are not ſo much interested in mechanical performances a ſufficient excute for our anxiety to give the honour of the invention to its right owner. We had collected from our searches that Mr Huyghens had diſcovered; by his analysis of pendulous motions, what kind of motion would be produced by any kind of varying force, and that a force varying in the proportion of its distance from the place of rest would produce iſochronous vibrations, whatever might be their ex­tent ; and had made experiments on the force of ſprings, and found them to vary according to this very law. In conſe­quence of this, he ſaw that a balance-watch might be made to anſwer the same end with his cycloidal pendulum-clock, which he had been for ſeveral years trying to fit for the diſcovery of the longitude of a ſhip at sea, under the protection of the States of Holland and the court of France, having obtained a patent monopoly from the States and from Louis XIV. When, after repeated diſappointments, he introduced his propoſed watches, with ſanguine hopes of their per­formance, but before any trial, and applied for ſuch an extension of his patent as ſhould alſo comprehend a balance regu­lated by a ſpring, he was oppoſed by the watch-markers. They had willingly acquieſced in his exclusive right to the pendulum-clock, which was entirely his own demeſne ; but they could not help considering this extension of his patent as an encroachment on a common which they had possessed from time immemorial. The oppoſition was general both in