

RESERVE COPY



A.D. 1790 N° 1730.

Locks and other Fastenings.

ROWNTREE'S SPECIFICATION.

TO ALL TO WHOM THESE PRESENTS SHALL COME, I, THOMAS ROWNTREE, of Surrey Street, in the Parish of Christ Church, and County of Surrey, Engine Maker, send greeting.

WHEREAS His most Excellent Majesty King George the Third did, by
5 His Letters Patent under the Great Seal of Great Britain, bearing date the
Twenty-third day of February, in the thirtieth year of His reign, give and
grant unto me, the said Thomas Rowntree, His especial licence that I, the
said Thomas Rowntree, during the term of years therein expressed, should and
lawfully might use, exercise, and vend, within England, Wales, and the Town
10 of Berwick-upon-Tweed, my Invention of "**A CONSIDERABLE IMPROVEMENT IN
THE CONSTRUCTION OF LOCKS AND OTHER FASTENINGS;**" in which said Letters
Patent there is contained a proviso, obliging me, the said Thomas Rowntree,
under my hand and seal, to cause a particular description of the nature of my
said Invention, and how the same is to be performed, to be inrolled in His
15 Majesty's High Court of Chancery within one calendar month after the date
of the said recited Letters Patent, as in and by the same (relation being
thereunto had) may more fully and at large appear.

NOW KNOW YE, that in compliance with the said proviso, I, the said
Thomas Rowntree, do hereby declare that my said Invention of a considerable
20 improvement in the construction of locks, and other fastenings, is described in
the plan or description thereof hereunto annexed, and in manner following
(that is to say) :—

Rowntree's Improvement in the Construction of Locks and other Fastenings.

First, I make one or more wheels, each of which are to contain two or more notches in different parts thereof; I then place as many of these wheels as I deem necessary upon pivot or centre; I then make as many leaves as there are wheels, which I also place upon another pivot or centre, and either in a vertical or horizontal position; one end of each of the said leaves shall be 5 inserted in one of the notches described to be in each of the said wheels. (These leaves are either to have of themselves an elastic force or be acted upon by a spring.) The leaves and wheels being then in contact with each other, whatever moves the one, the other is consequently moved with it, and by the pressure of the spring on the levers, the other notches on the wheels are con- 10 sequently deranged, so that no two of the said notches are opposite to each other; I then apply the bolt and tumbler that is usually applied in other locks. One part of the said tumbler is placed against the wheels, described as above, which prevents the tumblers rising so as to discharge the bolt; I then apply the key, which performs its office as follows:—First, it raises all, or as 15 many of the levers as I think proper, to a certain degree; by this motion of the levers, the notches in the wheels are brought exactly one over the other, so that they then appear as one notch; the common tumbler is then at liberty to pass into the said notch or opening of all the wheels, by which operation the said tumbler is at liberty to move far enough to disengage the bolt, and let 20 it pass to lock or open with the key, the same as in any common lock.

Another improvement consists of a lock with moveable wards, which I make in the following manner, viz^t:—I make as many wards as I deem necessary: these wards are to consist of whole circles or of parts of circles; if of whole circles, each ward is to have two inclined planes, one on each side of the key- 25 hole; if of the part of a circle, the inclined planes will commence upon each end of the segment (the use of these planes I shall describe when I come to explain the nature of the operation of the key); each of these circular wards are to have a shank projecting from the opposite sides thereof. I then place these wards one after another round the pin of the lock, placing all the shanks 30 that project from one of the sides of each of the wards or circles upon one common joint, with a spring either under or above each of the said shanks (or each of the shanks may be made elastic of themselves). Upon the end of each of the other shanks I make a notch or opening; I then apply the bolt, in which I make as many notches as there are wards to be in the 35 lock. One of the shanks of each of the said wards are then inserted in each of the notches in the edge of the bolt, and then, by the pressure of the spring upon the wards, the notches in the ends of the shanks are pressed

Rowntree's Improvement in the Construction of Locks and other Fastenings.

sometimes up and sometimes down, so that the shanks of the different wards became firmly locked in the edge of the bolt; I then apply the key, which comes in contact with the before-mentioned inclined planes, presses up and down the different wards and their shanks till all the notches are brought into
5 a straight line parallel with the bolt, at which time the bolt is at liberty to pass back and forward to open the lock, as is common with other locks. All the security of this method may be transferred from the bolt of the lock to the tumbler. One or more of the above-mentioned wheels or circular wards, and their appendages, may be applied with either of the others, so as to have no
10 connection with the proper key of either lock; but if a false or improper key be introduced, with an intent to open any of these locks, then this tumbler (which I call a dormant tumbler), wheel, or circular ward, is touched or acted upon by any other instrument than the proper key; it immediately becomes an additional security to the lock, by fastening in the bolt or tumbler of
15 such lock.

Another of my improvements in window fastenings made in the following manner:—First, I make a circular wedge or hook; this wedge when in contact with its proper staple or eye has two distinct properties; as it is turned into the said staple or eye, thus it draws the sashes together by means of one inclination
20 on the said hook or wedge, and by means of another inclination it will draw the other sash up; or, if the shrinking of the sashes require it, will push the said sash down, see the Drawing, Fig. 10. Other improved fastners is for fastning sashes at the side, which act by means of an inclined plane upon the bolt, as described in the Drawings, Figures 11, 12, and 13.

25 My next improved fastenings is for the purpose of fastning shoes, to be applied in place of what is generally known by the name of tongue, anchor, or chape. This I perform by means of one or more levers upon one or more centres brought together or extended by means of inclined planes operating on the different parts, as described in the Drawing, Figures 14 and 15. Also,
30 another fastner to answer the same purpose; by means of two spiral springs, acted upon by two slides, which when pulled draws the straps together, see the Drawing, Fig. 16.

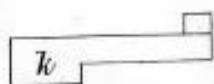
In witness whereof, I, the said Thomas Rowntree, have hereunto set my hand and seal, this Twenty-third day of March, One thousand seven
35 hundred and ninety.

THO^S ROWNTREE. (L.S.)

Profile of the letter k

A. D. 1790. FEBY 23. N^o 1730.
ROWNTREE'S SPECIFICATION.

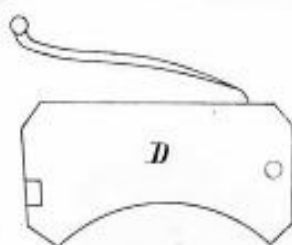
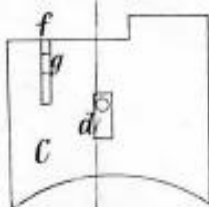
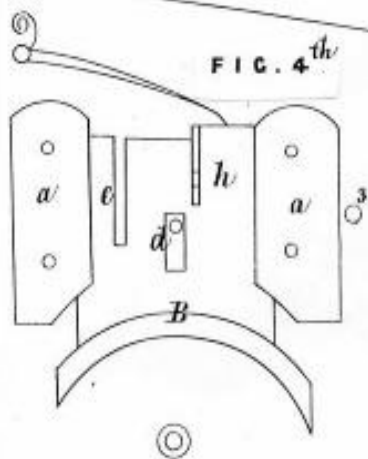
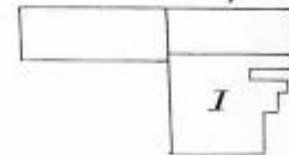
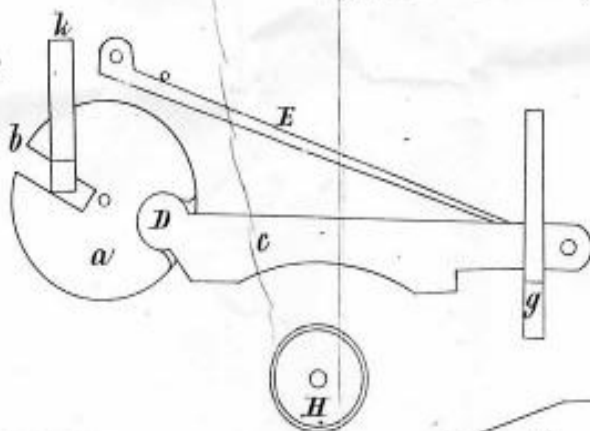
The Bolt **Fig. B**



Profile of the letter g

The Key I

FIG. 1st



Key

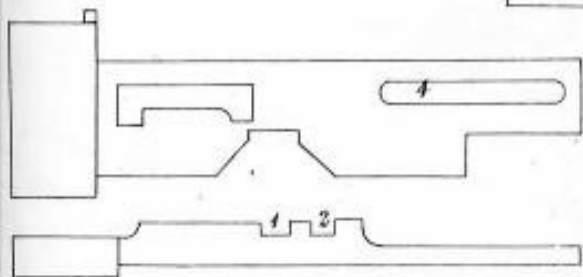


FIG. 7th

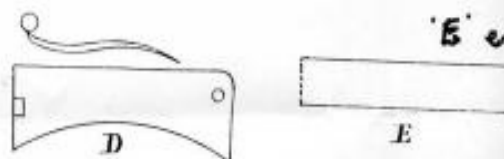
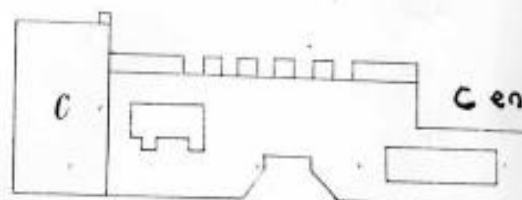
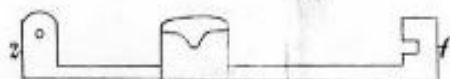
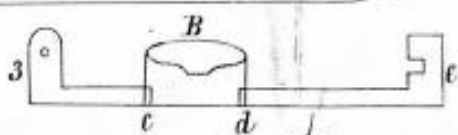
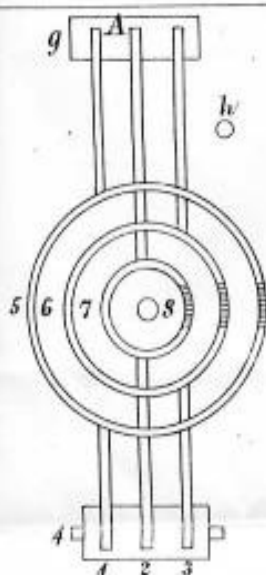


Fig. 1

Bolt end

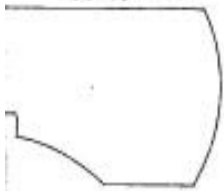
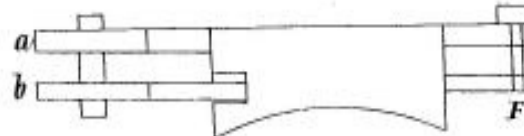
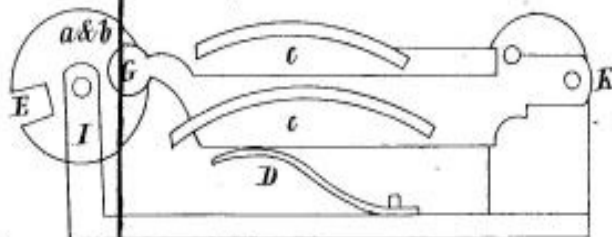
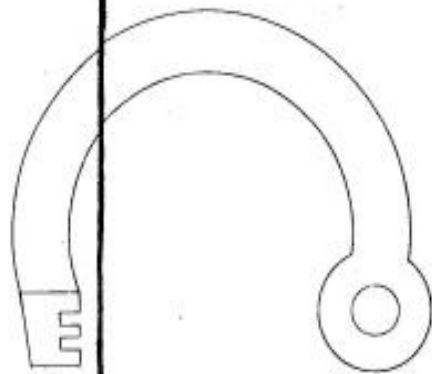
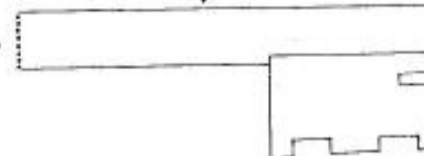


FIG. 2nd

Horizontal Position



The Key



Vertical position

Nearly the same as in Fig. 4th only that it has an Horizontal instead of a vertical action

FIG. 5th

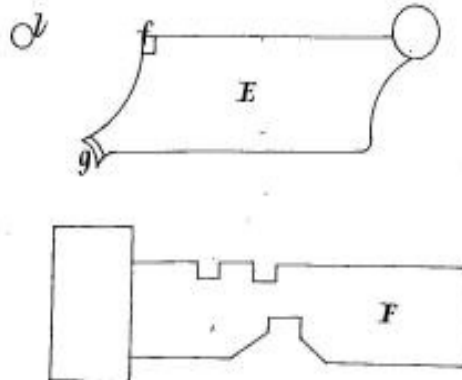
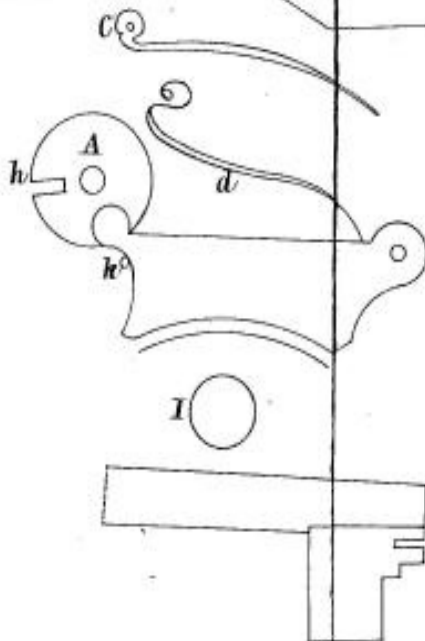


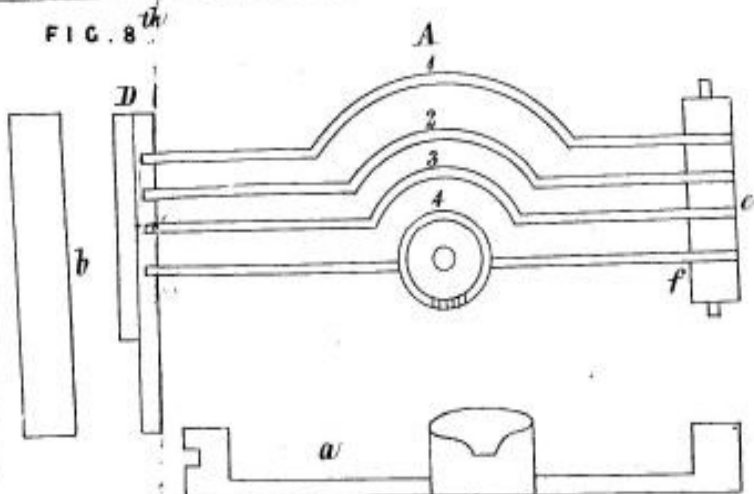
FIG. 6th



FIG. 8th

C end.

E' end.



first circular Ward in profile

II

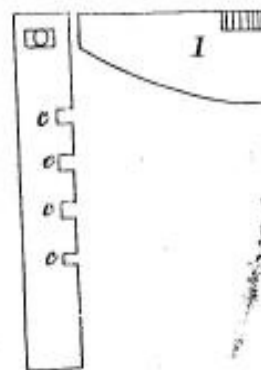


Fig. 2
end.

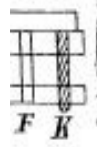
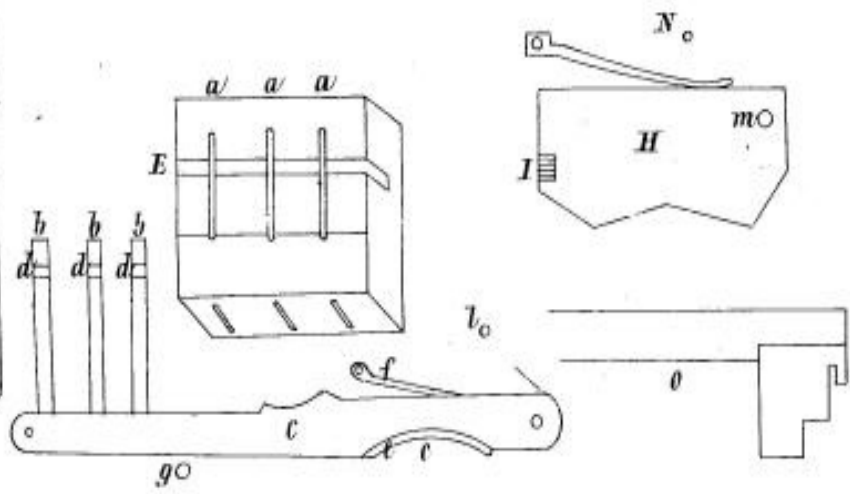
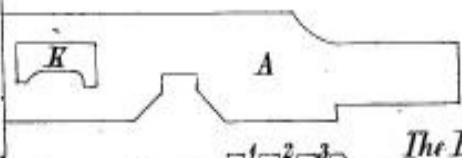


FIG. 3rd



The Bolt seen flat



The Bolt edgewise

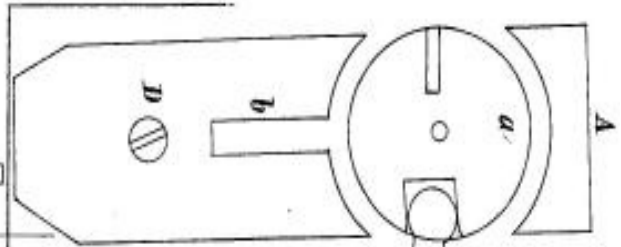
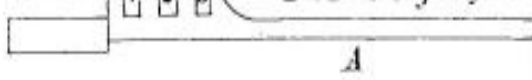


Fig 6
continued.

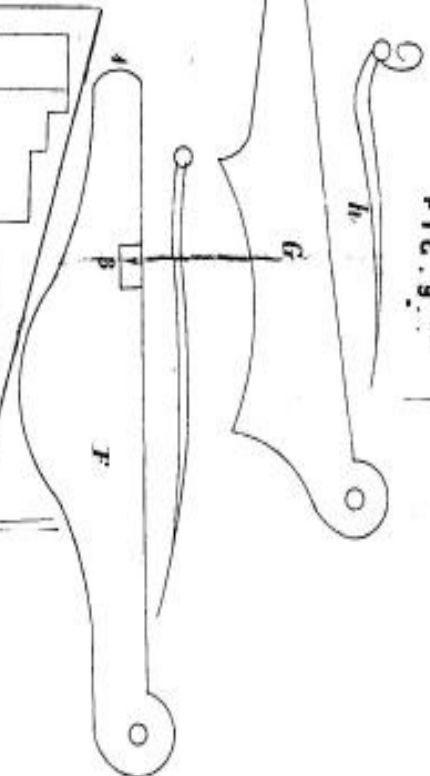
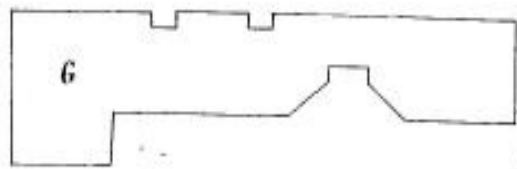
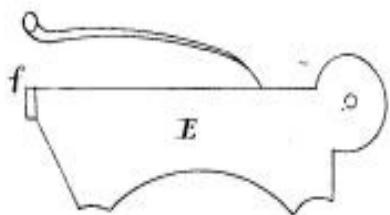
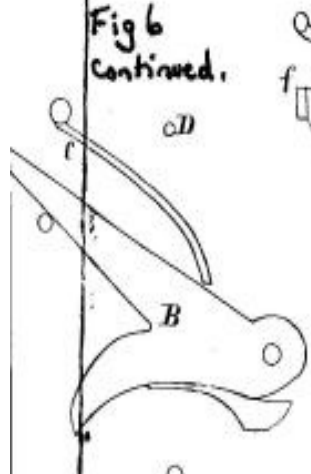


FIG. 9th

Fig. 8 continued

