standing various improvements made in them, was not effectually obviated for many years, during which they were tried, and in many instances prematurely condemned, either from real defects, or from the parties not knowing how to use them. They were not brought to perfection until the year 1837.

The wire-cartridges possess two principal advantages over loose shot ; they are propelled with greater velocity, and thrown more evenly. A loose charge is always thrown in patches ; the shots of a cartridge, as seen on a target, are comparatively equidistant from each other. There are four classes of wire-cartridges, which the patentees have named the *battue,* the *blue,* the *red,* and the *green;* each intended for a different range. There is some little difference in the construction of each of the three kinds ; the meshes of the frame-work are larger in the battue and the blue than in the red, and in the red than in the green, and there are doubtless other differences not perceptible to the uninitiated. The battue and the blue cartridges are intended for general use ; the battue for the shortest distance ; the blues will kill several yards further than loose shot of the same size, and of the four kinds, are, in our opinion, decidedly to be preferred ; each blue cartridge being thrown more nearly alike, they are more certain in their operation than the red and the green, which are intended for longer distances. The red may be serviceable in open places, when game is wild, and the shooter is provided with a gun of not less than fourteen guage, or with a very short barrel, which does not throw its shot very strongly. The green cartridges are intended chiefly for wild-fowl shooting ; these should be used in barrels of not less than twelve guage. The red and green cartridges retain the shot in the case longer than the others, and are carried with an astonishing force to an incredible distance, and at the same time very closely. The red may generally be trusted for long distances, especially from barrels of large calibre ; but at short distances the smallness of the circle they describe renders them objectionable. The green cartridges should never be used for shoot- ing game. The blue and battue only should be used in barrels of small guage.

The wire-cartridges do not require either a greater or less charge of powder than loose shot, but there is this peculiarity attending them. A heavy charge of powder throws the shot from the cartridge more closely than a small charge, by reason of its allowing more time for the escape of shot from the net-work. This is exactly the reverse of the manner in which the loose charge acts. The greater the charge of powder when loose shot and wadding are used, the more is the shot dispersed, and *vice versa.* Either loose shot or cartridge shot is projected with greater force and ve- locity when a heavy charge of powder is used. When birds lie well, we would recommend the shooter who adopts the cartridge to charge lightly with powder, to give the shots time to spread well; when moderately wild, we would charge lightly with powder in the first barrel, and heavily in the reserve barrel ; but when birds are very wild, both barrels should be charged with as much powder as the shoulder can conveniently bear, so as to give the charge the greatest possible force, and at the same time the greatest practicable degree of closeness. It is at long distances that the supe- riority of the cartridge is conspicuous ; when the loose charge is used, the increase of force that is obtained by loading heavily only tends to dispersing the shot, thereby rendering the increased momentum of little avail.

Amongst the advantages attending the adoption of wire- cartridges, it may be mentioned, that the recoil is not so

severe, and consequently a lighter gun may be used, than with the loose charge, and this is a great relief to the shooter in a heavy country, and especially on the hills in August, when the heat of the sun is frequently overpowering. The cartridges act well when fired from short barrels, perhaps more satisfactorily than when fired from long ones. The increased facility and expedition of loading is another advantage which should not be overlooked.

The main objection to wire-cartridges, and it is a ma­terial one to a person who is an indifferent marksman, is, that they do not describe a sufficient circle at short distances. When game is wild they are invaluable for the re­serve barrel of a double gun.

The wire-cartridges usually kept on sale contain, for the different guages, the following weight of shot.

Weight Weight

**Calibre. of shot. Calibre. of shot.**

**20 7/8oz. 14 11/4oz.**

19 1 13 13/8

18 1 12 13/8

17 1 11 1½

16 11/8 10 13/4

15 1½

When ordering cartridges, it is necessary to give the *guage* of the barrel, the *weight* of the cartridge, the *size* of shot, and the *description·,* that is, whether battue, blue, red, or green.

The green cartridges, fired from a common-sized fowling- piece, are not to be depended upon for any distance nearer than fifty yards ; and, for that reason, they should only be used for wild-fowl shooting, for which sport they may answer very well when fired from a reserve barrel. We would not recommend their adoption, even for wild-fowl shooting, to a person using a common-sized single gun, since by so doing he would hazard missing when the most favourable opportunities of killing presented themselves. A No. 3 red cartridge would suit better.

The wire-cartridge has been proved to be much superior to the loose charge for the stanchion, and heavy shoulder guns used on the sea-coast and rivers. For the largest shoulder guns, B or B B loose shot, or a No. 1 cartridge is usually adopted. A A loose shot, or a B or No. 1 cartridge will better suit the stanchion gun.

Taking Αιμ. As the manner of taking aim is a matter of primary importance to success in shooting, a few obser­vations on that head may not be misplaced here. When the dog points, or when birds rise near to him, the shooter should immediately draw back both hammers with the right thumb;@@\* but should the birds rise at a considerable distance, to save time he need only cock one barrel, as in this case, he has only to fire once. He should never be in haste. It is more prudent to let the bird escape than to fire hastily. If on open ground, he should not fire until the bird is at least twenty-five paces distant, by which means he avoids, on the one hand, the hazard of mangling it, and, on the other, a probability of missing ; for at the distance of from twenty- five to thirty yards, whether the piece be charged with loose shot or the wire-cartridges, the range of the whole charge will be wide, yet the pellets will be so close together that nothing can escape, if the aim be true, and, what is of no less moment, the finger also obedient to the eye. He should be deliberate in bringing up the piece to his shoulder, and in making it to bear on the object, but the moment he has brought it to bear, the finger should act in co-operation with the eye, the eye being kept open the while, so that

**@@@, Many experienced sportsmen disapprove of the practice of cocking both barrels at the same time. They think that it ought to be** a **rule never to cock either barrel, until the game be upon the wing, then that the left barrel should be cocked and tired, and thereafter taken from the shoulder. The right barrel should then be cocked and fired if necessary; if not discharged, it should be put back to the half cock, and the left re-loaded.**