

probably said the worst that can be laid to its charge. It is, on the whole, a good carriage, and has survived the very rough usage of South Africa with credit; which is not perhaps so much to be wondered at, because the material and workmanship put into it, whether at Woolwich or Sheffield or Newcastle, have been of the best.

It has a short trail and is fitted with an axial spring spade. In travelling position this spade hinges close up under the trail, and is secured by a spring catch; in action, the catch is withdrawn, and the spade, falling immediately into firing position, digs into the ground when the gun is fired. A pair of wire ropes attach the spade to a strong coiled spring, which is compressed by the recoil of gun and carriage. This spade holds its position, more or less, on firing; the spring in extending returns the gun to approximately its original position: and the arrangement has proved practical and reliable in the time of need.

Each side is composed of a jointless steel angle frame of varying thickness, with a thin steel plate riveted to it. The sides are held apart by a top and bottom plate, also riveted to the steel angle frame, and the carriage thus forms a strong box-girder beam. The axle-tree, a hollow tube of large diameter in the middle, and tapering towards the ends, but having its walls of one thickness throughout, could probably be simplified with advantage, but is at least perfectly trustworthy in its present form.

The wheels are undoubtedly the most difficult part of the whole equipment to make, and by their exigencies do much to limit rapidity of manufacture. They are of large (5 ft.) diameter, and made of wood as regards spokes and felloes. The felloes are of ash, and the spokes of oak, cleft, not sawn from the log; while the specification provides that all is to be of the best seasoned English wood, a material which, quite apart from its cost, is exceedingly difficult to obtain. The nave is built up of two thin stamped steel plates, arranged so that the spokes give the dish to the wheel, and are straight