

# Mr Carters Ringing Machine

called by him, The  
Campanamutophone

Notes on the construction and principles of the same, made from investigations undertaken by the writer and from notes dictated or supplied by the Inventor, M<sup>r</sup> John Carter, now (i.e. June 1925) living at No 25 Leasing St S.E.23.

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p.s. 1935

These notes are deposited with the Machine at the Victoria and Albert Museum, London.

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This book must not be borrowed without the consent of the Trustees & Museum Officer in charge of same.

E. Alex<sup>r</sup>. Young.  
155 Rushey Green S.E.6  
1925

p.s. 1935

*The Machine is deposited, on permanent loan, at the Science Museum, South Kensington, London. This was arranged by Mr Carter shortly before his death in 1926.*

*Mr Carter gave the control of the Machine to the Central Council of Church Bell Ringers, and appointed its Secretary – Mr E Alex<sup>r</sup> Young, together with the Rev C.D.P. Davies, as the first two Trustees.*

*Mr Davies dying in 1931, the Council then appointed Mr A.A. Hughes, of the Whitechapel Bellfoundry, in his stead. It also appointed two Demonstrators :- Mess<sup>rs</sup> G.R. Farndon & W Sharman and authorised them to charge a fee of half a guinea each for attending to demonstrate the Machine. Mr Farndon dying in 1934, the council appointed [ ed: the text breaks off here.]*

## HISTORY

*The Machine has been evolved from the Art of Ringing, peculiar to and as practiced in England. This Art consists of causing a certain number of Bells tuned together to a proper musical scale, to strike or sound one after another in varying sequences or "Changes".*

*The Changes are subject to accepted Rules as agreed by Ringers, a primary one being that no bell shall move more than one place at a time, nor ordinarily remain in one place more than two blows. and also that no change shall repeat in the series (either short or long) which it is desired to demonstrate. The Changes, so governed, are capable of infinite variety so far as ordinary practice is concerned.*

*M<sup>r</sup> Carter himself, being a Ringer of great accomplishment and skill and also a composer of many "Peals" and an inventor of several "Methods", was fully alive to the principles governing the production of Changes in the many Methods. Any ordinary Ringer so gifted would, from the very knowledge of the intricacy of the Art, have deemed it impossible to have designed a machine himself, which should produce mechanically a reproduction of any number of Changes in any Method to which such a machine might be set. But M<sup>r</sup> Carter had, besides his Ringing knowledge and inventive gifts, the good fortune to be a Master Craftsman at his Trade :- that of a Pistol-maker. He was also an adept at all sorts of small and delicately adjusted mechanical contrivances. To one so qualified therefore, if at all, might fall the lot of becoming the Inventor and at the*

same time the Maker of the Ringing Machine.

M<sup>r</sup> John Carter took up "Ringing" in 1873 when nearly 20 years of age, he having been born in 1854, and soon gave evidence of a natural aptitude for the Art. He rang his maiden peal ( 5040 Grandsire Triples ) at Willenhall in June 1874, and his first peal as a conductor was rung in February 1876 ( Holts Original 5040 of Grandsire Triples ). During this time M<sup>r</sup> Carter was working in West Bromwich for M<sup>r</sup> Paul Cashmore, a pistol-maker and also incidentally a fellow Ringer. He worked with him until 1880 when he entered the works of Mess<sup>rs</sup> Webley, well known in the same trade, with whom he remained until his retirement in 1918. About the year 1890 M<sup>r</sup> Carter, using Birmingham as a centre, was wont to organise bands of ringers to travel to the Bell-towers of the surrounding district in order to ring peals of 5000 ( & upwards ) Changes. It was upon one such occasion, having arranged a peal at Perry Bar he was travelling to his destination by tram-car ( some 3 or 4 miles. ) To pass the time he reverted to an idea that had struck him casually that morning & soon found himself deeply absorbed in it. So much, indeed, did he concentrate his mind upon it that it excluded all else. The idea was The Ringing Machine, and by the time he reached Perry-Bar, it had already taken practical shape in his mind, so far as the working principles and shape of the machine were concerned. It need only be added that the peal broke down, for the Inventor was too full of his new idea to conduct a peal, and was indeed to the surprise of his band of ringers, hardly able to ring at all. To follow in M<sup>r</sup> Carter's own words. "I was so anxious,

*that when I got home, I wished to start plotting it on paper, and it was only the lack of materials that made me wait 'til Monday. However, that morning I bought my drawing paper before going to work and that night I got out my drawing board and instruments and started my working drawings. These amounted in time to some 30 sheets, but I was soon able to determine the frame and let the finer details wait. I made a model of the frame in boxwood and Mr W Godden, who worked for Mess<sup>rs</sup> Barnwells, the Bellfounders, got it cast for me in gunmetal."*

*It would appear that though the work was thus well started it was a labour of many years before it was brought to completion. Mr Carters working day, and a full one, was put in at Webleys, some of his spare time must necessarily be devoted to Ringing, but the remainder of it went to the Machine and Mr<sup>s</sup> Carter says that it absorbed the whole of his own time in the evenings and many a Saturday and Sunday.*

*It was a long time ere each of the complicated pieces of mechanism were duly finished and assembled to be fitted to each other & to the frame and before they were able to justify not only the Inventors skill and patience, but his confidence that what worked well on paper would work in practice. This period extended over some 15 years. He says "During this time the fact that I was working upon the Machine became known and many of my Ringing friends who had heard of the job upon which I had embarked, deemed it impossible. When I had got it into shape and was satisfied that it was working, I invited some of my Ringing Associates in to see it*

*amongst others Mess<sup>rs</sup> Groves, Walker, Kent, Mitchell & Smith. It was then being driven by a foot-lathe, and I rang them a course of 'Duffield Maximus'<sup>†</sup> they being all much impressed."*

*If at this time the Inventor had "let well alone", the Machine today would have presented itself in all its completeness and showing his idea finished with a Unity far more telling than we find today. At that time present 12 gongs ( kindly given by M<sup>r</sup> John Taylor ) were not used, but 12 cup bells which were fixed along the top of the Machine, on a common spindle and these were struck by hammers actuated from below. The reason this arrangement was abandoned was due to Sir A Heywood, whose interest in the Machine was now quickened. Sir Arthur came with the Rev C.D.P. Davies and the Machine being successfully demonstrated to them, he, though delighted with the Machine, thought the bells poor in tone and the striking mechanism too noisy. The result was the bells were taken off the Machine and placed within a fan-shaped Table-box and connected electrically with it. Sir Arthur also arranged for a gas-engine and an electric motor. M<sup>r</sup> Carter next connectd the Machine, to his piano keyboard, by means of an ingeniously contrived box of levers, electrically controlled. He had also arranged M<sup>r</sup> Taylors gongs for use but the mechanical contrivances proved faulty. The Machine thus lost its unity, tho' hundreds of Ringers from all parts came to see it and to hear it ringing various changes upon the piano. It also lost its very ingenious attachment whereby the changes were printed*

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<sup>†</sup> [ed: a note was added above this to read 'Stedman Cinques' ]

*off on a reel of paper, the motor not proving strong enough to take the work. The reel for the diagrams, however, it was found possible to retain.*

*In 1920 ( Dec ) M<sup>r</sup> Carter came to reside at his present address bringing his Machine with him and adapting it to be driven from accumulators. Being desirous of ringing a Peal ( very long deferred ) he availed himself of the offer of a neighbouring friend and Ringer, M<sup>r</sup> E.A. Young, to move it to the latter's house. This enabled M<sup>r</sup> Carter to use the Public Electric supply. He now thought that he could again turn to M<sup>r</sup> Taylor's gongs and this time built them up successfully in their present box. He was the more influenced to this inasmuch as at a public demonstration the "The Ancient Socy of College Youths," given at The "City Tavern" the piano rendering of the changes had been somewhat disappointing.*

*On the occasion of M<sup>r</sup> Carter's 70<sup>th</sup> Birthday 1924 a very successful demonstration of the Machine & the Battery of Gongs was given, at M<sup>r</sup> Young's house, 277 Stanstead Road, Forest Hill. A number of representative ringers were invited and some 20 attended including the Rev C.D.P. Davies, Winney A Langdon & also Miss E Parker of the Ladies Guild &, on behalf of the Victoria & Albert Museum, M<sup>r</sup> Lankester Jones ( Science Sect<sup>n</sup>. ) attended, he having already evinced great interest in the Machine on account of its proposed Connection with the Camanpological Exhibit at the Museum. An account of the Methods rung and also a photograph of M<sup>r</sup> Carter with his Machine appeared in the next N<sup>o</sup> of the "Ringing World." It is noteworthy that the only visitor*

*successful in "calling" a "touch" upon the Machine, was Miss Parker, ( A Touch of Grandsire Triples and afterwards, at M<sup>r</sup> Carter's request, one of Stedman Triples, both of which were well brought round. )*

*EAY*

*p.s. 1935*

*The above was compiled from many notes, partly taken down in shorthand, made at various interviews with M<sup>r</sup>. Carter. It was read over to him with much interest and concurrence.*



# *The Machine at the V & A Museum*

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*Since its deposit, the Operators have overhauled and adjusted it and it has been operated 2 or 3 times a year.*

*A new battery of bells was given by Mr A. A. Hughes, Trustee, and they were erected and set up as at present working, by Mr W Sharman, Operator. The latter also with Mr Fardon rearranged the electrical contacts & supply & it is now possible to control the motor speed. A new DC Motor was substituted for the old one (A.C.)*

*EAY*

*1935*

*For a description of the Machine and how to operate it see the latter pages of this Book.*