

17 Credit for the invention of the device and system described in this paragraph belongs not to Sir Charles Wheatstone, as has until recently been thought, but to an American, Decius Wadsworth, who in 1817 constructed a device identical in principle with that described on pp. 342-347 of The Scientific Papers of Sir Charles Wheatstone, published by the Physical Society of London in 1879. The Wheatstone device used a 27-element outer alphabet (26 letters and a word-separator), and a 26-element inner alphabet; the Wadsworth device used a 33-element outer alphabet (26 letters and the digits 2 - 8, inclusive), and a 26-element inner alphabet. Also, whereas in the Wheatstone device only the cipher component could be varied, in the Wadsworth device both components could be varied according to identical or non-identical mixed sequences. The only extant model of the Wadsworth device is owned by the Hamden Memorial Society, Hamden, Connecticut, and is in the temporary custody of the Army Security Agency Museum. The only extant model of the original Wheatstone device in the United States and possibly in the world is owned by William F. Friedman, Washington, D.C. ]

*Smith*