UNITED STATES PATENT OFFICE.

ALBERT J. MYER, OF WASHINGTON, DISTRICT OF COLUMBIA.

IMPROVEMENT IN SIGNALS.

Specification forming part of Letters Patent No. 50,946, dated November 14, 1865.

To all whom it may concern:

Be it known that I, ALBERT J. MYER, of Washington city, District of Columbia, have invented a new Mode of Communicating by Signals; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a front view of two disks having certain characters upon them to be used in communicating by signals. Fig. 2 is a diametrical section through the disks, showing the manner of attaching them together.

The object of this invention is to afford means whereby persons within signal distance of each other can communicate intelligibly by certain movements of flags or other objects, and a systematic arrangement of letters and numerals or other characters upon movable and stationary disks, without the possibility of having their messages detected by others.

To enable others skilled in the art to understand my invention I will describe my improved method of signaling.

In the accompanying drawings, A represents a disk having printed or engraved upon it in any sequence certain figures or characters, which indicate signals to be made or characters or words to be written. B is a smaller disk having upon it the letters of an alphabet in any desired sequence, which it may be desired to refer to in signaling. These two disks are pivoted together centrally by means of a clampscrew, on loosening which the smaller disk may be turned in either direction, so as to bring different letters opposite to the numerals, after which, by tightening the screw *a*, the disks will be rigidly connected together.

Each person giving and receiving signals should be provided with one of these devices, and there should be a preconcerted understanding between such persons for moving the disk B and causing different signal combinations to stand at different times for different letters or messages, for the purpose of concealing the meaning of the signals.

The mode of signaling is as follows: Suppose two persons within signal distance of each other should desire to communicate the word "are," and by preconcerted signals have both adjusted their disks so that the letter A shall be opposite to the number 11. Now, to spell the word "are" the signals designated by the combination "11" for "A" are made, and this will indicate to the observer the letter "A." Then there should be made the signal indicated by the figures "8111" or "R," and this would indicate to the observer this letter. The signal or signals indicating the letter "E," which are "1181" on the disk, conclude the word are.

It may be desirable for purposes of concealment that the word "are," though often occurring, should not again be indicated in the same communication by the same signals. In this case let it be understood by preconcert that upon any given signal, such as the dropping of a flag or some peculiar wave of a flag, the smaller disk, or that which has upon it the letters of the alphabet, is to be moved upon the largest disk, or that which has upon it the numerals, turning to the right hand, say, the distance of four spaces, marked upon the disk. Now, without cessation of signaling, both persons, the transmitter and the receiver, would upon this signal each so change the position of the disks that in again signaling the word "are" "A" would stand opposite to and be designated by the combination "188," "R" would be designated by the combination "1188," and "E" by "1881." The letters "A R E" or the word "are" thus signaled would in no way resemble the same word before sent. In this way it can be so arranged by preconcerting that no word shall appear twice in the same manner in the same message.

There may be several disks joined together, having various figures and characters upon them, and by preconcert it may be understood that in certain messages some of them are to be used and not others, or there may be more than one row of figures or characters on any of the disks and the preconcerted arrangement for using may be changed infinitely, so that the uninstructed cannot discover in what manner the disks are to be moved or used.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The within-described system of signaling, which is controlled by means of letters, numerals, or other characters upon disks that are put together in such manner that the relative positions of such characters can be changed at pleasure, substantially as set forth.

ALBERT J. MYER.

Witnesses: R. T. CAMPBELL, E. SCHAFER.

A. J. Myer, Reading Signals. Nº 59,946.



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