Note: The translator may be replaced by a system of multiple-contact relays to accomplish exactly the same purpose. To translate the 32 smallest permutations setup in the clock wheel contact through into 32 single symbols which are then fed into the same type of switchboard as platinum or lightening reduced to 32 contacts. Such arrangements and circuits would be permitted to delay any action place for depression of a key.

Date of creation: April 6, 1936

William F. Friedman

This drawing was made on April 28, 1936.
Switchboard 5
Connecting contacts of "translator" to 16 segments of selector. Six contact points have duplicate connections as shown, but variable at will.

Note: The "translator" may be replaced by a system of multiple-contact relays to accomplish exactly the same purpose, viz., to translate the 32 pulses set up in the 5 permutations set up by the cipher wheel contact levers into 32 single-input characters which, are then fed into the same type of switchboard as shown at right and reduced to 16 contacts. Lock-out arrangements and circuits would be provided so that only one action takes place per depression of a key.

Date of conception April 6, 1936
William F. Friedman

This drawing made on April 28, 1936.
Cam-wheel-operated contact levers and contacts. Cam-wheels advance one step per depression of keyboard.

Cipher commutator wheel, 26 segments, constant regular rotation by motor drive, (not shown)

Bunch of indicating devices (lamps, or printer magnets, etc)

"Distributor" or "Selector" head, 26 segments, brush arm rotating in synchronism with cipher commutator wheel.

Invented April 6, 1936
William F. Friedman

Keyboard, 26 character