

MACHINE METHODS OF ACCOUNTING

VERIFIERS

THE development of manual bookkeeping procedures was accompanied by the development of detailed checking routines which had to be performed at each of the steps in the various recording and transcribing operations. This detailed checking practically doubles the volume of work performed.

The development of systems to eliminate the time-consuming detailed checking operations has effected numerous economies. More important than the savings of clerical cost are the savings of hours and days in the time required for closing the records and preparing statements which are constantly becoming more vital to management. Timeliness of reports permits the correction of wrong conditions or the immediate advantageous use of favorable conditions to increase profitable operations.

In the punched-card method of accounting there are many procedures of establishing and maintaining accuracy. Of these, one of the most important is the method of key verification

which establishes the accuracy of the punched card once and for all time, immediately following its preparation.

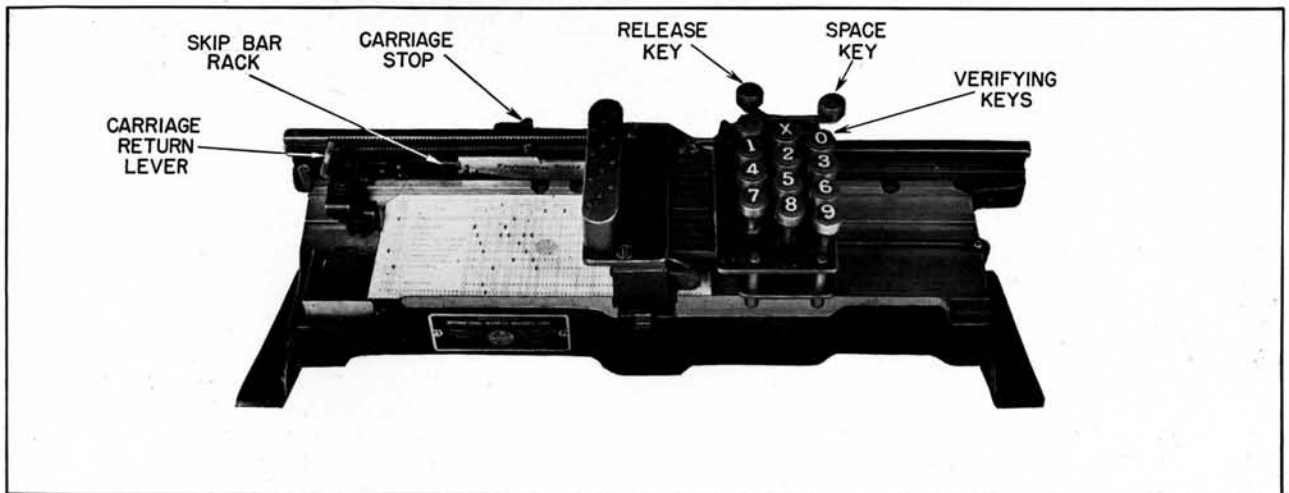
The term "verification," as used in the punched-card method of accounting is usually limited to the proving of the accuracy of the punching of the card. Because of the important part played by the card, it is essential that its accuracy be established as early as possible by some accepted system of verification. As a general rule, all cards which are to serve as accounting media for use in the preparation of records having destinations outside the company, which are to be used as a basis of payment or collection of money, or which are to be used in the calculation of profits should be verified.

The punched-card method has only one manual transcription of data. Consequently, only one verifying operation is required. As previously mentioned, this operation usually is performed by key-verification immediately after the cards have been punched.

Punched Hole Verifier (Type 51)

The theory of key verification is identical with that of any checking procedure—that repetition of work by a different person reveals any errors which may have been made by the person who originally performed the task. Such a method of verification is essentially a comparison of the original data with those record-

ed on the punched card. Key verification reduces the human element hazard in the checking procedure and gives definite assurance that the punched-hole records are correct. Key verification can be effected at a speed equal to or, in many cases, greater than that of the punching operation.



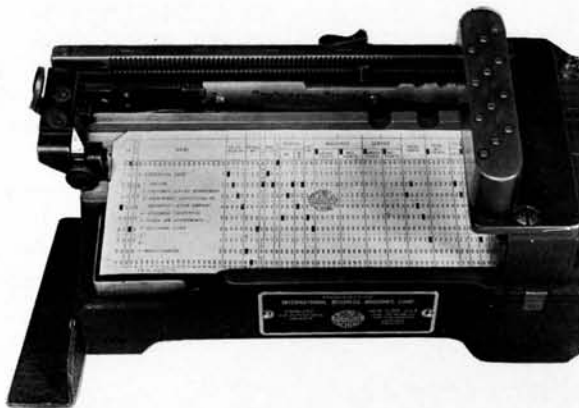
Operation

The manual operation of the Punched Hole Verifier is identical with that of the Card Punching Machine. The punched card is placed in the verifier and the operator, reading data from the punching source records, proceeds as though actually punching. As each key is depressed, a small plunger goes through the hole in the card and permits the card to advance one column. If a key is depressed that does not correspond to the hole punched in the card, the operator readily senses the increased pressure on the key and the failure of the carriage

to advance, thus becoming aware of an error. Comparison of the punched card with the original data is then made to determine what correction is necessary.

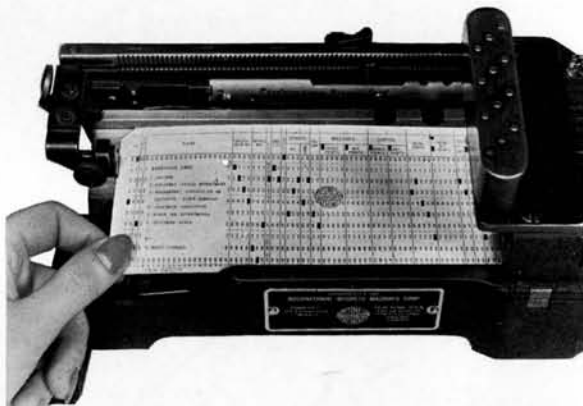
When it is necessary to key-verify the 80th column, a gate prevents the operator from removing the card until a key is depressed corresponding to the hole punched in this column. This gate remains up until after the 80th column is verified and then drops, permitting the operator to remove the card readily. It is a standard feature of the Punched Hole Verifier.

POSITION OF THE GATE



AT THE
80th COLUMN

AFTER THE
80th COLUMN



General

The keyboard of the Punched Hole Verifier is identical with that of the Card Punching Machine (Type 1). Each of the keys is easily depressed, because no perforation of the card is involved. The touch system of operation may therefore be advantageously used.

A skipping mechanism, similar to that on punches, is operated by depressing the "X" key in the first column of the field to be skipped.

If a properly cut skip-bar is in the machine, the predetermined number of columns will be skipped. An automatic high bar, as well as an X-skip-bar, may also be used. The same skip-bar used in the punch during the original transcription of data may be used in the verifier for the verification of the same cards.

A carriage stop, located on the back of the machine, may be set to determine the column on which verification is to begin. This is used when verification does not begin on column 1.

Electric Punched Hole Verifier (Type 52)

The Electric Punched Hole Verifier was developed simultaneously with the development and application of the automatic feeding and ejecting mechanism for punching equipment. The reduction in fatigue, which the Electric Punched Hole Verifier effects by the elimination of the manual feeding and removal of cards, enables the average operator to maintain a high rate of production of verified cards.

Operation

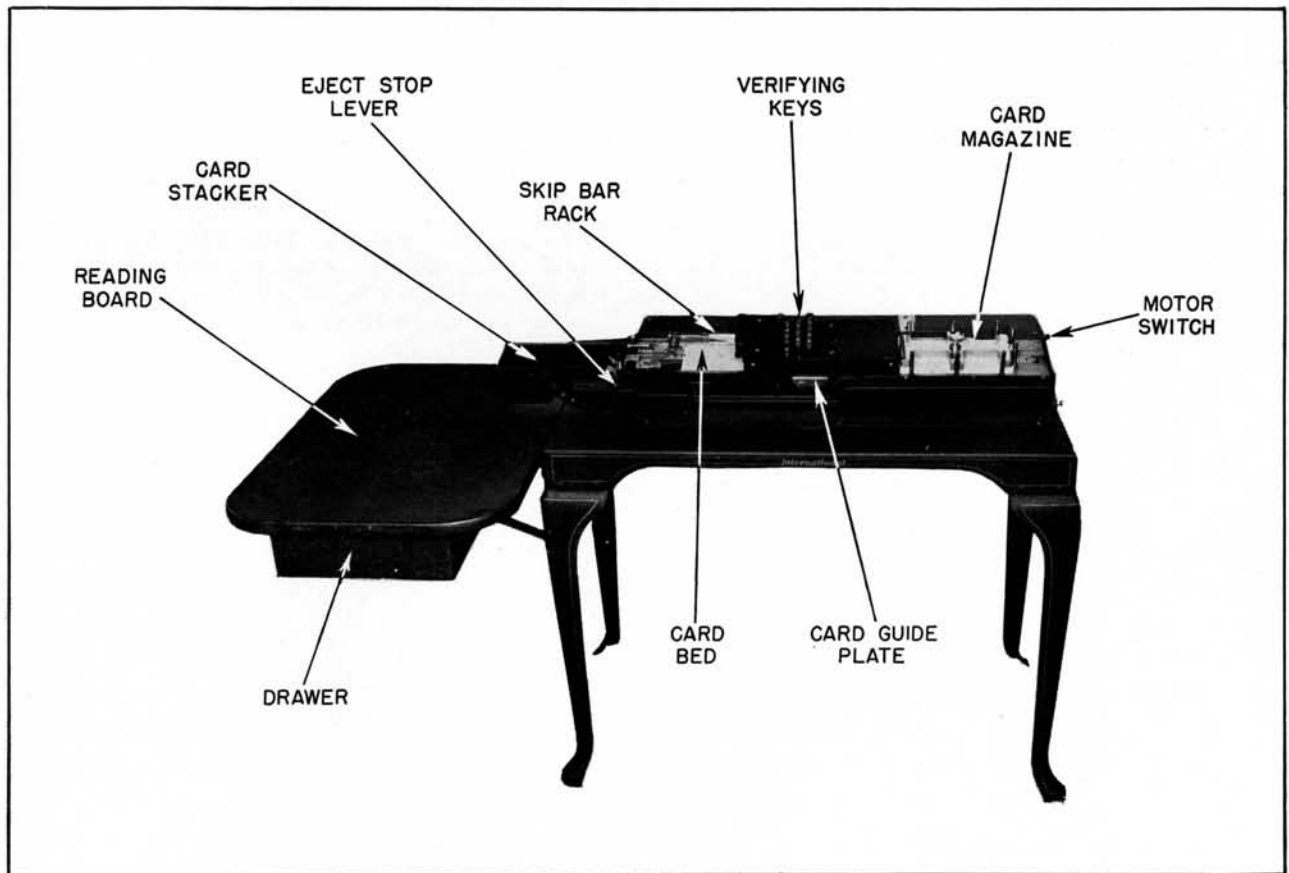
The keyboard of this machine is identical with that of the Electric Card Punching Machines. The method of operation, like that of the Punched Hole Verifier, involves reading the data from the punching source records, and depressing the keys as though actually punching. The card advances one column after the depression of a key corresponding to the hole punched in the column being verified. An incorrect punching is recognized in the same manner as on the Punched Hole Verifier, i.e.,

increased pressure on the depressed key and failure of the carriage to advance. Unlike the Punched Hole Verifier, the verification of the last column results in the automatic ejection of the card; and the next card is fed into position for verification.

Approximately 300 cards may be placed in the feed hopper at one time. They should be in such order that the sequence of original documents can readily be followed. The automatic feeding of cards from the feed hopper and their ejection are similar to those of the automatic feed punches.

Skipping

The method of skipping is identical with that of Electric Card Punching Machines. Either X-skip or automatic skip-bars may be used. The same skip-bar used on the punch during the original transcription of data may be used in the verifier for the verification of the same cards.



Special Devices

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Special Skip Key

The Electric Punched Hole Verifier may be equipped with a special skip key which works in conjunction with an X-skip-bar. This special skip mechanism allows the verifier to skip over punched fields that do not require verification even though no hole has been punched in the "X" position of the card.

Marking Device

The Electric Punched Hole Verifier may be equipped with a special printing mechanism to mark each column that is verified. The purpose of this device is to mark each column of a card being verified in order to indicate that the cards have been through the verifying opera-

tion. The depression of any key (except the "X" key) causes a small letter or numeral ("v" in the illustration above) to print along the bottom edge of the card directly under the column being verified.

The printing of the symbol does not prove the correctness of the punching, but it does indicate that some key was depressed for each column.

Current Requirements

The Electric Punched Hole Verifier may be operated on direct or alternating current at either 110 or 220 volts. The current consumption for 110 volts D. C. is .70 amperes and for A. C. 1.94 amperes.