

Figures 31 and 32 indicate the relationship of the weeks of experience of punching machine operators to the number of cards punched for C card at the Pittsburg Operation Office and for the H card at the Detroit Operation Office. The quantity of cards punched per hour was influenced by a system of incentive pay. Operators who punched more than a prescribed number of cards of acceptable quality during a 2-week period were given extra pay for each 100 cards punched above the established standard. Incentive pay was paid for approximately one-third of all cards punched and approximately 71.4 percent of all cards were punched by operators during periods for which they received incentive pay.

The punching of cards was verified either completely or on a sample basis. The purpose of verification was not to eliminate all errors but to insure that the level of errors was kept within acceptable levels. Until the verification of punched cards indicated the work was of satisfactory quality, the work of each punching machine operator was verified 100 percent. Verification was performed by the use of a manually operated verifier. (See fig. 33.) All cards found in error were corrected.

As soon as it was determined that less than 6 percent of the cards punched by a punching machine operator contained errors and that the number of cards not punched did not exceed 1.2 percent, only a sample of 4 percent of the work of the card punching machine operator was verified. However, when the errors found in the 4-percent sample indicated that the quality of the work was not acceptable, the work of the operator was verified 100 percent, until the record of errors indicated that the work was of satisfactory quality. Card punching machine operators were required to produce work of acceptable quality within a given time period in order to be retained as an employee and in order to receive incentive payment for the work performed in excess of established standards. Card punching machine operators with the poorest work performance were assigned to verification work. Except for excess cards (cards representing unusually large quantities for an item), cards found in error during verification on a sample basis were not corrected.

The use of sample verification of cards resulted in a saving of approximately 140,000 man hours. The number and proportion

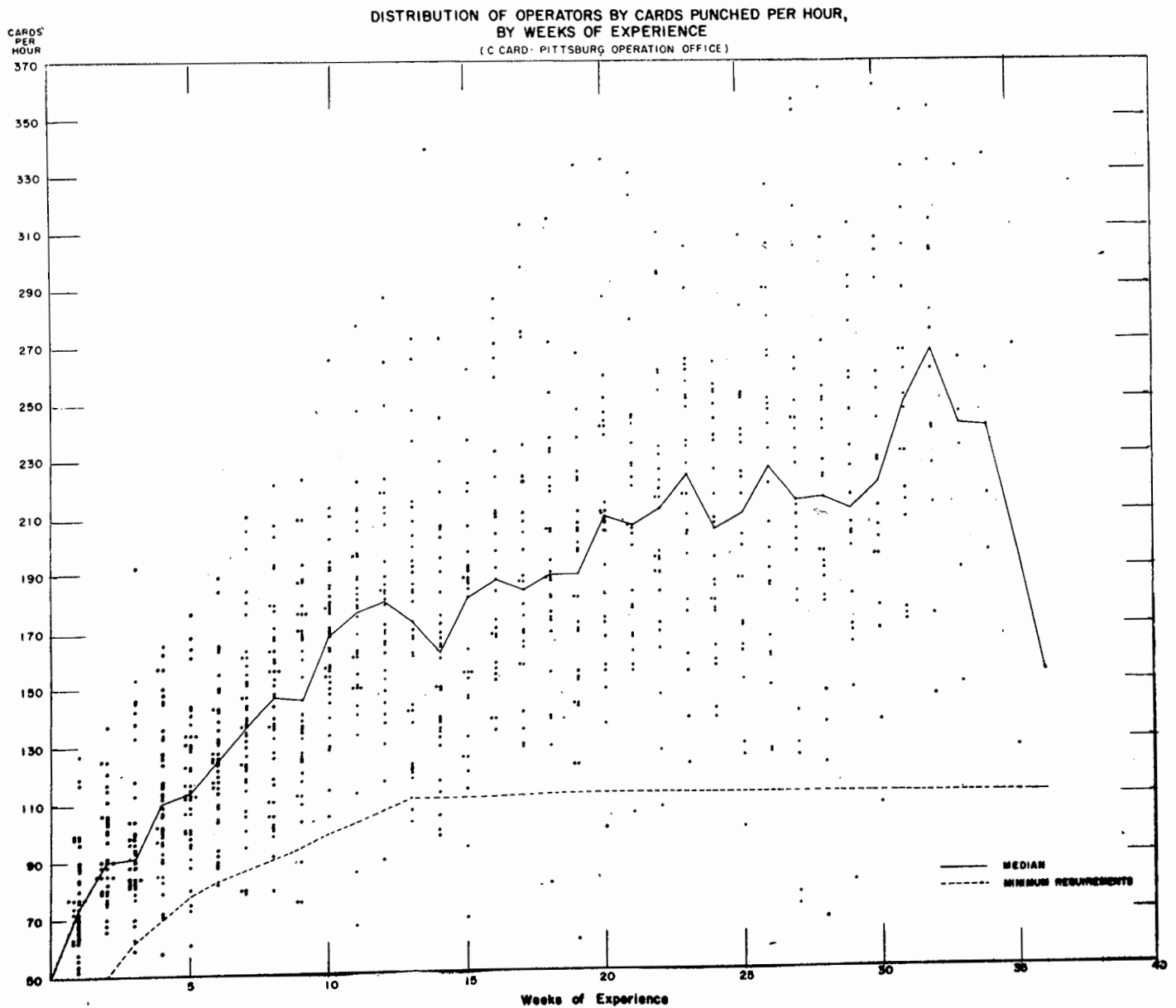


FIGURE 31.—C cards punched per hour by weeks of experience, Pittsburg Operations Office.