*AN AUTOMATIC PAPER FOLDER¹*ROBERT LEKRONE, CLAUDE MARMASSE, C. B. FERSTER,
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This paper describes an apparatus for folding long strips of paper in the manner of an accordion pleat. The device has been used for folding cumulative records and could be applied to long paper strips such as are commonly used in EEG or other types of physiological recordings.

Figure 1 is a photograph of the device as it has been constructed in our laboratory. The roll of paper is mounted on a carriage driven

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by a lever-crank mechanism similar to the drive on the wheels of a locomotive. The principle of the operation is shown in Fig 2. The paper is folded by two knives, working alternately, which insert the paper in between the two pairs of cylinders, C_1 and C_2 . The cylinders are spring loaded, and the pressure by the springs creases the paper. When the carriage is in the middle position, the two blades are in the same plane, but a cam system rotates the blades into the position for inserting the paper as the carriage approaches the

rollers. The axis of rotation of each knife is linked to a cam which travels on a bar on the side of the carriage. At the two ends of the carriage, the profile of the bar is designed to bring the blade into the exact position to insert the paper between the two rollers. As the knife blades insert the paper between the rollers, a gear (not shown) rotates the rollers facilitating the insertion of the paper. A ratchet on the gear prevents the counter rotations of the

rollers holding the paper until the carriage reaches the opposite side, when another cam pulls the rollers apart, releasing the paper.

The folding machine has been used successfully with strips of paper which are pasted together and can be operated by an unskilled operator at the rate of approximately 50 ft per min.

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