JOSEPH SLOPER'S AMERICAN PATENTS

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Joseph Sloper's Letters Patent granted by Queen Victoria on 1 September 1858, for his invention of perforating holes into cheques and other documents, as a means of indelibly marking them, is well documented; so, too, has his protracted correspondence with the British Post Office to enable him to extend this technique to perforating stamps with initials, numerals and designs as a security measure against theft. This patent expired on 31 August 1872.

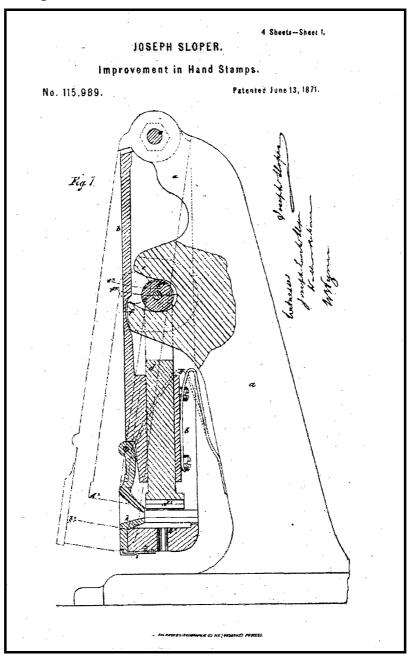


Figure 1. Joseph Sloper's patented "Improvement in Hand Stamps" (side view)

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On 4 March 1871, Joseph Sloper, the former house painter and builder now describing himself as a civil engineer, applied to the United States Patent Office to be granted a patent for his "Improvement in Hand-Stamps", primarily those for dating railway tickets. The side view of his mechanism is shown in Figure 1.

A vertical arm is pivoted at the top of the body of the device, and is 3-sided in cross-section. A securing plate is attached to the back of the lower portion of this arm to form a channel in which a square rod can move. The top of the rod is attached to a horizontal cylinder which moves in a channel in the body of the device, the channel being curved in such a way that as the arm is moved towards the body of the device, the rod within it is forced downwards with potentially great pressure because of the leveraging ratios incorporated into the design. In his application, Joseph Sloper points out that the bottom of the inner rod could be fitted interchangeably with a perforating die, a punch head, a cutting tool or a stamping head. Near the lower end of the arm is a mouthpiece into which the railway ticket (Sloper's example) to be punched is fed. Pushing the railway ticket against the stop at the back of the arm not only assures that the railway ticket is correctly positioned under the punch head, but also pushes the pivoted arm (against a leaf spring) and thus activates the punching process. These days some electronic or photoelectric means is used to activate such punch mechanisms!

Not only did Joseph Sloper give detailed drawings of this mechanism, but he also included four other alternative designs for the tilting arm to be able to apply downward pressure on the punching/perforating die.

The witnesses whose signatures appear on the application were Joseph Lavell L. Sloper (Joseph's eldest son) of Walbrook House EC, and J. B. Wynn, of Scorer & Harris, notaries, 24 Royal Exchange, London. Joseph Sloper's signature also appears on each sheet of drawings.

Patent number 115,989 was granted on 13 June 1871 for this invention. Such a device was unlikely to have been used to perforate stamps, as the Sloper Workshop Impression Books show horizontal-lever devices and "screw-bridge" devices (like a small book press) being produced for stamp perforating.

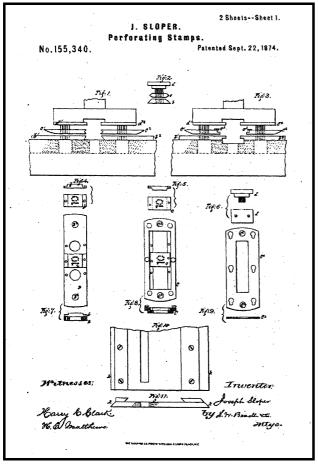
Public attention is called to SLOPER'S IMPROVED ROTATING MACHINES for Perforating Amounts on Bills of Exchange, Credit Notes, &c., Dating or Numbering. SLOPER'S PATENT PERFORATING MACHINES for Dating Railway Tickets. This System is adopted in India and Hot Climates, for the reason that Ink dries so rapidly, and thus the inconvenience arising from the Pads constantly drying is avoided. -It is simple in Operation, Instantaneous, and Effectual.—It is in general use in Government Offices, Railway Companies, Banks, and large Commercial Firms at home and abroad as a perfect security against Erasures or Fraud. INITIAL YOUR POSTAGE, RECEIPT, AND ALL OTHER Perforating Railway Ticket STAMPS ON SLOPER'S SYSTEM Dating Machine. AS UNDER: Improved Machines for Dating or Numbering Coupons. The GOVERNMENT, for the protection of the Public, has Specially sauthorised Mr. Sloper, the Inventor and Patentee of this System, to supply Postage, Receipt, and other Stamps perforated with the Initials of Firms, in conformity with His Proposition made to the Government, to prevent purloining, Removal of Stamps from Letters, and Sale of Stamps so marked. The Government recommend the Public to adopt Mr. Sloper's plan, and apply direct to his Office for all particulars to Manager for Sloper's Patents, 20, King William St., City, London.

Figure 2. Advertisement for Sloper's perforating machines.

Figure 2 is an advertisement from "The Railway Diary and Official's Directory" for 1887 (McCorquodale & Co Ltd) and shows a device of this patent design specifically for dating railway tickets.

However, more relevant to our interest in the perforating of documents, and of stamps on documents, is another patent for which Joseph Sloper applied to the US Patent Office on 6 February 1874, entitled "Improvement in Perforating-Stamps". The purpose of this invention was to enable a combination of "certain fixed parts with certain movable parts", with stops to ensure the proper alignment of the parts. Such combinations were designed to facilitate formation of hole patterns for dates and currency amounts in which individual digits would need to be changed on a frequent basis (see Figures 3 and 4). Witnesses on this application were George Frederick Warren and John Dean, of Harrison Bros., notaries, of 17 Gracechurch Street, London. Patent number 155,340 for this invention was granted on 22 September 1874.

Joseph Sloper's patent for "Improvement in Perforating-Stamps"



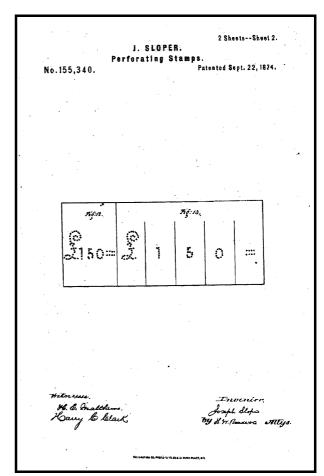


Figure 3.

Figure 4. Sample strike

One such device using this mechanism, apparently made in 1877, is known to have been used by the Sydney department store David Jones and Company in the 1890s with partial strikes of the date numerals appearing on New South Wales postage stamps, which had been used fiscally [Ref. 1, 2, 3].



References

- 1. South Pacific Perfin Bulletin, No. 21, October 1992, page 7.
- 2. South Pacific Perfin Bulletin, No. 24, July 1993, page 6.
- 3. South Pacific Perfin Bulletin, No. 67, January 2005, page 8

[Ed:- The web link for these US patents is shown below.] www.google.com/patents?vid=USPAT155340&id=OM9kAAAAEBAJ&dq=joseph+sloper