Domestic and Revenue Uses

surety bond - illegal revenue use - 5 examples on document 50 cent flat rate - 10/1/62 to 8/1/64 - a 30 cent on piece is recorded



French mail
British packet
to **Malta**30 cents per 1/4 oz.
4/57 - 1/70

5 covers recorded

all pay single rate





Hingham "bat" cancel French treaty mail British packet to **Greece** 30 cents per 1/4 oz. 4/57 - 1/70

French mail
British packet
to Smyrna, **Turkey in Asia**30 cents per 1/4 oz.
4/57 – 1/70



French mail American packet to Calais to Burma 30 cents per 1/4 oz. 4/57 - 1/68



French mail British Service to Wellington, India, miss sent to Wellington, NZ 30 cents per 1/4 oz. 4/57 - 1/68

British mail, American packet to Andaman Islands - India 33 cents per 1/2 oz. e4/59 - 1/68 treated as fully paid at the 30 cent French mail rate



Advin & Forbes

British mail via Marseilles to Natal, Cape Colony 45 cents: 1/4 - 1/2 oz.

7/57 - 1/68

British mail via GB, care of US consul to **St. Helena** 33 cents per 1/2 oz. 5/54 – 6/63





British mail to Cape of Good Hope 33 cents per 1/2 oz. 7/57 - 1/68

British mail to **Cape Coast Castle** (Gold Coast) 33 cents per 1/2 oz. 7/57 - 1/68



Prussian Closed Mail to **Denmark** 35 cents per 1/2 oz. 1/68 -1/70





Bremen - Hamburg mail via Bremen to **Sweden** 33 cents per 1/2 oz. 7/57 - 2/67

Prussian closed mail to **Russia** 35 cents per 1/2 oz. 5/63 - 1/68



British mail via Marseilles to Macao, Portuguese China 53 cents up to 1/2 oz. 6/63 - 1/68





British mail via Marseille to **Philippines** 57 cents: 1/4 - 1/2 oz. 12/61 - 6/63

British mail via Marseilles to **Shanghai, China** 57 cents: 1/4 - 1/2 oz. 12/61 - 6/63



Ninety Cent Value: EDU November, 1861



blue



pale blue



dark blue



dull blue

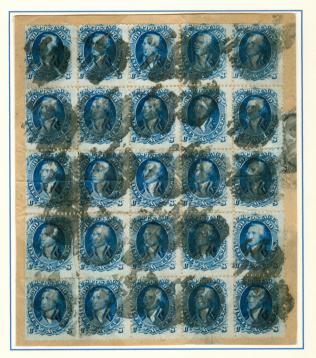


small flaws e









largest recorded multiple

ex Ishikawa















Prussian closed mail to **Germany** 4 x 28 cents per 1/2 oz. : 9/61 - 1/68 signed Ashbrook e



British mail, American packet via Fernando Po to Corisco Island, now claimed by Equatorial Guinea 8 x 33 cents per 1/2 oz.: 5/54 - 1/68

only recorded example: signed Ashbrook e

British transit to North German Union 6 x 15 cents per 1/2 oz. 2 1/2 oz. to 3 oz. 1/68 - 7/70 e



M. S. Zutent Office.

OFFICIAL BUSINESS.

Other Clork

To avenue des Changes Papeies

6 x 15 cents per 7 1/2 grams via French packet to France: 4/57 -1/70. Credit changed from 72 to 84 and back to correct 72 for 6 rates confusion caused by difference between 1/4 oz. (U. S.) and 7 1/2 grams (French). cleaned and repaired





French treaty mail, British packet to **Hong Kong**6 x 30 cents per 1/4 oz. : 4/57 - 1/70
cleaned and refolded where stamps overlapped cover



British mail via GB to Uruguay
4 x 45 cents per 1/2. oz. : 1/61 - 1/68
4 uses are recorded from this correspondence: all are fronts

Grill Experiments Illustrated in Patent 70,147 by Charles F. Steel, October 22, 1867







lithographed die essays on wove paper, unprinted area embossed and grilled points down

all rights were licensed to the National Bank Note Company

trial cancel from Washington, DC







141.00.0N Manufacture of Bootage Stamps Patented October 22mg

Post Office approval of "Steel Nature" only recorded example











early experiments in grilling including patterns of grills over all-over grills only recorded examples





individually grilled diagonally and embossed, then printed and gummed trial cancel, to test whether printing or grilling should come first



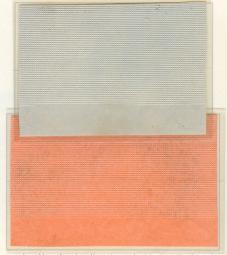
test of embossing with central design, ungrilled

Early Grill Experiments

Production by Female and Male Rollers



"First experiment of grill" - 3 examples recorded



produced by a female roller - depressions in the roller force the paper up into the depressions, forming pyramidal bosses, points up



test of ink penetration - only recorded example - sample produced by a male roller, projections on the roller piercing the paper, in this instance from the reverse, forming sharp horizontal ridges, points up





tests of ink penetration - samples produced by male roller, pyramidal bosses, points down - only recorded examples

Essay Grills Covering the Entire Stamp

Music Box Grills



trial cancel













only recorded example



regular points up

irregular points up

irregular points down N.Y. SEP. 24, 1867

pink trial cancel







India proof paper



points down - boxy ridges



partially grilled













rose

trial cancel

black

unprinted

lake

preprinting paper creases

Essay and Issued Grills Covering the Entire Stamp

"A" Grills



points up



points down horizontal ridges



NY P.O. cancel used to test grilling



shooting star

5 examples recorded

2 examples recorded

First Issued Grills - the "A" Grills





female roller - points up - EDU AUG 13, 1867





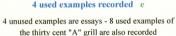
imperf pair



irregular block of 3 e



4 used examples recorded e



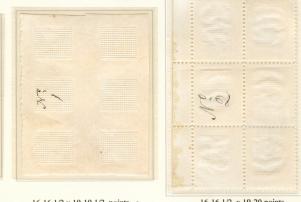


4 blocks recorded e



Experiments in Grill Production First Essays Points Up - Later Essays Were Points Down

Reduced Grill Size - Female Rollers - "C" Grills

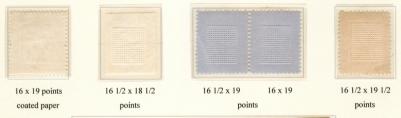


partial erasure - coated paper

16-16 1/2 x 19-19 1/2 points e

16-16 1/2 x 19-20 points

Planing down of "A" grill rollers produced "C" grill rollers with depressions of varying sizes. The "A" grills weakened the stamps and required too much pressure to produce quickly.



OPERATOR OF GRILLING MACHINE NATIONAL BANK NOTE COMPANY MAKER OF GRILLING CYLINDER FOR CONTINENTAL BANK NOTE COMPANY. Alex Reid W. Dougherty

only recorded example