

illuminated border, exactly surrounding the space required to attach a bank-note. When any distinguished visitor arrives he is requested to place his autograph to an unsigned note, which is immediately pasted over one of the open spaces. They are thus illustrated by signatures of various royal and noble personages. That of Napoleon III., Henry V., the Kings of Sweden, Portugal and Prussia, a whole brigade of German Princes, Ambassadors from Siam, Persia, Turkey—the latter in Oriental characters—and some of our higher nobility. There are some scientific names, but few literary celebrities; among them those of Lady Sale, and Mehemet Ali, the Pasha of Egypt.

Upwards of a million is paid into the Bank daily, in the shape of notes. When cashed a corner is torn off, and this now valueless piece of paper, after being duly entered in the books, is deposited in chambers beneath the sorting-room, where it is kept ten years, in case it may be required as testimony at some future trial, or to settle any other legal difficulties. In one of the court-yards of the building is a large circular cage, within which is an octagonal furnace constructed of bricks, laid only half over each other, so as to afford ample ventilation. In this furnace, once a month, all the notes that were received during the month previous ten years back are consumed. The furnace is five feet high, by at least ten in diameter; yet we are assured that it is completely filled by the number returned during one month.

## MAGNETISM AND GRAVITATION.

WE submit the following criticism on "Magnetic Influence on Iron Ships and Compasses," which appeared in our last issue, with a rejoinder by the author of the article. The discussion will be of much interest to our scientific readers.—[EDITOR MARITIME MONTHLY.]

### GRAVITATION *versus* MAGNETISM.

I HAVE read with pleasure the article on "Magnetic Influences on Iron Ships and Compasses," which appeared in the August number of the MARITIME MONTHLY, and quite agree with the author that the means now taken to counteract the disturbing influence of the ship's iron upon the compass needle are both defective and deceptive; but while admiring the article as a whole, I make bold to play "critic" for a little upon one paragraph, occurring near the close of the article.

The author, "R," says: "These facts also show a grand 'scien-