

**Postmark-Preserving Envelope.**

It is frequently important in settling questions in law to determine the date on which a letter or document was deposited in the mails, and before the introduction of envelopes the date was always preserved by the postmark being stamped upon the letter. But since the custom of using envelopes has become so universal the postmark is thrown away with the envelope, unless, indeed, pains be taken to preserve the envelope with the letter, and even in this case there can be no absolute certainty that the envelope is the same that came around the letter or document.

Some time since L. W. Leeds, of this city, conceived the idea of cutting a hole in the envelope to

**Selling Articles at Industrial Fairs.**

At exhibitions of machinery and agricultural fairs, a rule is sometimes adopted by which managers prohibit exhibitors from selling articles on the grounds. We hope this rule will not be adopted at a single fair this year. It is unwise and unjust in some of its features. It is for the mutual advantage of exhibitors and visitors at fairs, that there should be a free exchange and sale of commodities allowed. Persons who visit fairs see articles which they want and desire to possess, and those who exhibit are in the same frame of mind to part with or sell their articles. Private sales are not forbidden; we do not allude to these, but to public sales and delivery on the grounds.



THE BEST MECHANICAL PAPER IN THE WORLD

VOLUME VII.—NEW SERIES.

The SEVENTH VOLUME of the NEW SERIES of the SCIENTIFIC AMERICAN commenced July 5, 1862.

The publishers embrace the opportunity to thank their old patrons and subscribers for the very liberal support they have hitherto extended to this journal, and hope for a continuance of their support.

The circulation of the SCIENTIFIC AMERICAN is far greater than that of any other publication of the kind in the world, and is the only weekly newspaper of the kind published in the United States.

The SCIENTIFIC AMERICAN has the reputation, at home and abroad, of being the best weekly journal devoted to mechanical and industrial pursuits now published, and the proprietors are determined to keep up the reputation they have earned during the seventeen years they have been connected with its publication.

The SCIENTIFIC AMERICAN is indispensable to every inventor, as it not only contains illustrated descriptions of nearly all the best inventions as they come, but each number contains an Official List of the Claims of all the Patents issued from the United States Patent Office during the week previous; thus giving a correct history of the progress of inventions in this country. We are also receiving, every week, the best scientific journals of Great Britain, France and Germany; thus placing in our possession all that is transpiring in mechanical science and art in these old countries. We shall continue to transfer to our columns copious extracts from these journals of whatever we may deem of interest to our readers.

No person engaged in any of the mechanical pursuits should think of doing without the SCIENTIFIC AMERICAN. It costs but four cents per week; every number contains from six to ten engravings of new machines and inventions which cannot be found in any other publication. It is an established rule of the publishers to insert none but original engravings, and those of the first-class in the art, drawn and engraved by experienced artists, under their own supervision, expressly for this paper.

**TO THE CHEMIST AND ARCHITECT!**

Chemists and architects will find the SCIENTIFIC AMERICAN a useful journal to them. All the new discoveries in the science of chemistry are given in its columns, and the interests of the architect and carpenter are not overlooked; but all the new inventions and discoveries appertaining to these pursuits are published from week to week.

**TO THE MILLWRIGHT AND MILLOWNER!**

Useful and practical information pertaining to the interests of millwrights and millowners will be found published in the SCIENTIFIC AMERICAN, which information they cannot possibly obtain from any other source. To this class the paper is specially recommended.

**TO THE PLANTER AND FARMER!**

Subjects in which planters and farmers are interested will be found discussed in the SCIENTIFIC AMERICAN; most of the improvements in agricultural implements being illustrated in its columns.

**TO THE MAN OF LEISURE AND THE MAN OF SCIENCE!**

Individuals of both these classes cannot fail to be interested in the SCIENTIFIC AMERICAN, which contains the latest intelligence on all subjects appertaining to the arts and sciences, both practical and theoretical; all the latest discoveries and phenomena which come to our knowledge being early recorded therein.

**WAR! WAR! WAR!**

Our summary of the war news, which has been so highly complimented by our readers and cotemporaries, will be continued in the coming volume so long as the war lasts, accompanied with copious illustrations of new war implements of various kinds, such as cannon, firearms, projectiles, &c., &c.

**TO ALL WHO CAN READ!**

Everyone who can read the English language, we believe, will be benefited by subscribing for the SCIENTIFIC AMERICAN, and receiving its weekly visits; and while we depend upon all our old patrons renewing their subscriptions, we would ask of each to send us one or more new names with his own. A single person has sent us as many as a hundred mail subscribers, from one place, in a single year! The publishers do not expect every one will do as much; but if the five thousand subscribers, whose subscriptions expire with the present volume, will each send a single name with their own, they will confer a lasting obligation upon us, and they shall be rewarded for it in the improvement we shall be enabled to make in the paper by thus increasing our receipts. The following are the

**TERMS.**

To mail subscribers:—Two Dollars a Year, or One Dollar for six months. One Dollar pays for one complete volume of 416 pages; two volumes comprise one year. The volumes commence on the first of JANUARY and JULY.

**CLUB RATES.**

Five Copies, for Six Months..... \$4  
 Ten Copies, for Six Months..... 8  
 Ten Copies, for Twelve Months..... 15  
 Fifteen Copies, for Twelve Months..... 22  
 Twenty Copies, for Twelve Months..... 28

For all clubs of Twenty and over, the yearly subscription is only \$1 40. Names can be sent in at different times and from different Post-offices. Specimen copies will be sent gratis to any part of the country.

Western and Canadian money, or Post-office stamps, taken at par for subscriptions. Canadian subscribers will please to remit 25 cents extra on each year's subscription to pre-pay postage.

MUNN & CO, Publishers,  
 No. 37, Park-row, New York.

FROM THE STEAM PRESS OF JOHN A. GRAY



**MORRISON'S POSTMARK-PRESERVING ENVELOPE.**

show a portion of the surface of the letter inside, upon which the postmark might be stamped through the hole. On applying for a patent through the Scientific American Patent Agency, it was found that the very same plan had already been patented by Benjamin Morrison, of Philadelphia, and Messrs. Leeds & Franklin then purchased Morrison's patent, which is here illustrated.

The engraving represents an envelope prepared in accordance with this plan. The hole is cut by a stamp, and may be of any form which fancy may suggest. That preferred by the inventor is an oval, crossed by bars at right angles in the form of a cross. The postage stamp is pasted upon the cross, adhering to both the letter and the envelope, and then the postmark is stamped over all, partly upon the envelope and partly on the letter.

By this arrangement, besides the preservation of a record of the date and place of mailing, the letter and envelope are fastened together, preventing the letter from being opened or abstracted, or a false envelope from being substituted for the genuine. The defacement of the stamp is also rendered certain by the opening of the letter.

The patent for this invention was granted June 19, 1860, and further information in relation to it may be obtained by addressing Leeds & Franklin, at 112 Broadway, New York city.

**Tea Brands and their Meaning.**

The following will interest housekeepers:—"Hyson" means "before the rains," or "flourishing spring," that is, early in the spring; hence it is often called "Young Hyson." "Hyson skin" is composed of the refuse of other kinds, the native term for which is "tea skins." Refuse of still coarser descriptions containing many stems, is called "tea bones." "Bohea" is the name of the hills in the region where it is collected. "Pekoe" or "Pecco" means "white hairs," the down of tender leaves. "Powchong," "folded plant." "Souchong," "small plant." "Twankay" is the name of a small river in the region where it is bought. "Congo" is from a term signifying "labor," from the care required in its preparation.

ABOUT 240 tons of iron ore are raised daily for shipment at the Jackson Mine, Marquette, Lake Superior.

EDWARD HARRIS, manufacturer of fine woolsens, at Woonsocket, R. I., is about erecting a new mill for the prosecution and enlargement of his business.

It would be well, therefore, to set one or two days apart at the close of every fair for public sales and delivery.

**INGLIS'S CUP ATTACHMENT FOR HYDRANTS.**

It is well known that when cups are attached to hydrants by chains they are very liable to be detached and carried away, but the annexed cut represents a plan for attaching a cup which renders it perfectly secure, and sure to remain as long as it lasts.



The cup is formed on the end of the nozzle, the pipe being fitted to turn with a water-tight joint, so that in drawing water into a pail the end of the nozzle may be turned down. The pipe rises a little within the cup and has a screw upon its end to receive a hose.

Steps have been taken through the Scientific American Patent Agency to procure a patent for this invention, and further information in relation to it may be obtained by addressing the inventor, Samuel Inglis, at the office of the Chronicle, Pittsburgh, Pa.