

## Correspondence.

## The Copyright Law Amendment.

To the Editor of the Scientific American:

Allow me to call your attention to some errors in your article of October 21, entitled "A Dubious Amendment of the Copyright Law."

The act was introduced into the Senate by Mr. Hoar, early in April, and a few days earlier a duplicate of the bill was introduced in the House by Mr. Ranney.

The Library Committee desired, on consultation, that it be referred to the patent committees, and it was so referred.

A hearing was had before each committee. It was explained that there was no intention to make anything copyrightable that was not already copyrightable as a "model or design intended to be perfected as a work of the fine arts." R. S., § 4952.

Such things were illustrated by the Matsys wrought iron, the Berlin cast iron, the Parisian bronzes, the Sevres, Dresden, Della Robbia, Limoges, Louzmy, Muiton, and Copeland potteries and faïences, the Cebbini repousse work, Palissy and Henri III. ware—confessedly works of the fine arts under any definition.

Attention was called to the artistic products of this country in faïence, iron, bronze, brass, silver, and plate, by which the houses and households of the country may be and are made beautiful at small cost, and which have been largely imitated abroad in inferior material and execution and sent to this country; and the committee were shown that copyright protection had been taken on many American designs, but that the requirements about marking had resulted either in disfiguring the goods or that the requisite finish destroyed the marks; and further, that the place where customers and experts looked for marks was on the back or bottom.

It was also explained, and the able lawyers of the committee readily saw, that it was intended simply to change the place of marking copyrightable articles. The question of fact, What is a work of the fine arts? would remain where it was before.

It was argued and conceded that all things upon which labor and expense have been bestowed, unnecessary to prepare them for service, but solely to improve their appearance, are broadly to be considered as "works of the fine arts." Modeling, sculpture, carving, architecture, engraving on wood or metal, lithography, painting, printing, book-binding, cabinet work, inlaying, repousse, enameling, have always been held to be "fine" as distinguished from "industrial" arts, and works of these sorts are subjects of copyright just as music and prints are.

The difference between copyright and design patent for these things has been heretofore, and now is, this: If the work has been published, the author or proprietor can obtain only fourteen years' protection at most under the patent laws. If it is unpublished, he can obtain copyright protection for twenty-eight years with right of renewal. He can take ten copyrights at least for the cost of one patent. Formerly the law gave advantage to the patentee in the matter of marking his goods. Now the patentee and copy-righters are on the same footing in this regard.

The introduction of the bill was noticed largely in the papers, the hearings before the committees were spoken of, the leading artists, art manufacturers, and dealers took a lively interest in the measure, and corresponded with congressmen about it. The Senate passed it unanimously. The House suspended the rules at the request of Messrs. Ranney and Ritchie, and with the advocacy of Mr. Cox to allow it to be reported and passed, and probably it was as fully understood as any measure ever before Congress.

But it must always be remembered that the privilege of adjudication on what is and what is not "fine arts" is vested in the Federal Judiciary and nowhere else, and that a postmaster's receipt is as good proof of entry for copyright as the librarian's certificate (R. S. §§ 4956, 4961), so that an assumption of judicial forms by a recording officer in refusing to record can hurt no one but himself. The only quasi-judicial authority of the Librarian of Congress is under ch. 301, acts of 1874. He may refuse registration of a print or engraving which is not a pictorial illustration or work connected with the fine arts, and prints or labels designed to be used in connection with other articles of manufacture go to the Patent Office. THOS. WM. CLARKE.

Boston, October 24, 1882.

Notwithstanding our correspondent's explanation, the meaning of the law in question remains uncertain. It fixes clearly enough the place for putting the copyright mark on objects subject to copyright; but at the same it enumerates, as copyrightable articles, a class of objects not clearly made "subject to copyright" by this or any previous act of Congress. The act reads as follows:

An Act to amend the statutes in relation to copyright.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That manufacturers of designs for moulded decorative articles, tiles, plaques, or articles of pottery or metal subject to copyright may put the copyright mark prescribed by section forty-nine hundred and sixty-two of the Revised Statutes, and acts additional thereto, upon the back or bottom of such articles, or in such other place upon them as it has heretofore been usual for manufacturers of such articles to employ for the placing of manufacturers', merchants', and trade marks thereon.

Approved, August 1, 1882.

The foregoing is ostensibly intended to obviate certain disadvantages arising from the requirement of the act of June 18, 1874, that (except in the case of books) the copyright mark should be put upon some "visible portion" of the object copyrighted, that is, "if a map, chart, musical composition, print, cut, engraving, painting, drawing, chromo, statue, statuary, or model or design intended to be perfected and completed as a work of the fine arts."

The wording of the act approved last August makes presumptively copyrightable a class of articles not hitherto considered as "works of the fine arts," and now its advocates claim that the Librarian of Congress transcends his functions in declining to accept their extension of the meaning of the term. It seems to us that until the Federal judiciary has decided the question in dispute the librarian cannot well do otherwise than abide by the established usage of the English language, which limits the term "fine art" to works designed wholly for ornamental or æsthetic purposes, excluding those primarily intended for use, however elaborately beautiful.

Our correspondent says: "It was argued and conceded that all things upon which labor and expense have been bestowed, unnecessary to prepare them for service, but solely to improve their appearance, are broadly to be considered as 'works of the fine arts.'"

Under this definition every piece of figured crockery, every embroidered collar or slipper, every striped or otherwise decorated plow or wheelbarrow, in short nearly every article of apparel, machine, tool, household utensil, or other product of the industrial arts, is a work of fine arts, since they have had labor bestowed upon them solely to improve their appearance.

In that it is the basis of a claim for copyright for this new order of "fine arts," the law in dispute may well be called dubious.

It remains for the courts, not for the Librarian of Congress, to say that a new meaning shall be given to an old word in the interpretation of statute law.

## A Whale Snaps a Log Line.

To the Editor of the Scientific American:

The following may be of interest to the readers of your valuable paper:

On the writer's last voyage from Baltimore to Rio de Janeiro, via Pernambuco, his attention was called to a large whale leisurely floating on the water near the stern of the vessel. All at once he seemed possessed with a spirit of frolic, diving and coming to the surface with the most playful motions. As his huge head descended he would slowly expose his tail, until for several seconds it remained erect on the water.

I chanced to have one of Messrs. John Bliss & Co.'s logs in use, the line and rotator towing astern. Never in thirty years' of sea experience did I see or hear of a whale biting anything, but to my surprise he took the rotator of that log in his mouth. Immediately my mate and a passenger, in order to save the indicator, seized the line, which quickly snapped in their hands, and was drawn off by the whale, who wound it round and round his head and tail until he appeared completely bewildered. This incident occurred in lat. 10° 5' south, long. 38° 11' west.

I would advise all ship masters to haul in their line and rotator when whales are about or they may lose them as did your obedient servant,

JOHN T. HOLT,

Master of ship David Stewart.

Ship David Stewart, at Sea, Sept. 9, 1882.

## Comets.

To the Editor of the Scientific American:

The following theory of comets is submitted to the consideration of those who can either prove or disprove its correctness.

A comet consists of a nucleus and an atmosphere, for the most part invisible, extending around it in every direction as far at least as the so-called tail reaches. The sun's rays in passing near or through the nucleus are so modified as to render visible a part of the cometic atmosphere opposite the sun. When the nucleus approaches the sun with the tail behind it, and passing around the sun appears with the tail before it, there has been no swift changing of tail, but merely different portions (or radii) of the cometic atmosphere have been made visible.

Whenever the nucleus approaches near the sun the latter is enveloped in the cometic atmosphere, and abstracts from it whatever is necessary for its use.

Should this theory be correct the earth must have passed through the atmospheres of many comets, which have produced no greater effect on it than the zodiacal lights have done. FURMAN LEAMING, M.D.

Romney, Indiana, October 21, 1882.

## The Elevated Steam Roads, New York City.

The *Elevated Railway Journal* says: "The correct traffic figures of the Manhattan Railway Company for the twelve months ending September 30 show that during the year 86,361,029 paying passengers were carried over the line. This gives a monthly average of 7,196,769, and a weekly average of 1,660,789. Divide the year's traffic by days, and we have 237,253, which, if all the lines were operated continuously, day and night, would give an hourly average throughout the year of 9,869. But the lines are not all

operated continuously, two of the four being closed at night and on Sundays; and then, too, the elevated roads have their dull seasons and their busy ones, just as surface roads have. This is well illustrated in the reports for May and July. In the former month, 7,920,875 passengers were carried, while in the latter there were but 6,637,137, a falling off of 1,283,738. Again, although the daily average for the year was 237,253, the days' traffic taken separately differ as widely as that of months. The heaviest travel of a single day within the year just closed was on April 11, when the report shows 319,138. On December 31, 304,183 passengers were carried; on May 30, 296,808, and on December 23, 296,560.

"But the distribution of the travel throughout the twenty-four hours of the day is, of course, still more uneven. As we have said, two of the four lines are closed at night (from 8 P.M. to 5:30 A.M.), and the two that are kept open have but few passengers after midnight. There are three hours in the morning and three in the evening known as commission hours, when the fare is but five cents, and in these six hours 65 per cent of the entire traffic is handled. Taking the daily average, then, as a basis of calculation, and dividing it according to this percentage, we have 154,212 as the average per diem for the six commission hours, or nearly 26,000 an hour; and if we had any means of ascertaining the exact traffic per hour, the results would show an average for the hours between 6:30 and 7:30 A.M., and 5:30 and 6:30 P.M. fully double this. We know that these figures must strike many of our own citizens, even, as fabulous, but they are compiled from the daily traffic slips of the company, and these are made up from the actual number of tickets collected from the canceling boxes.

"The year's travel, divided by the mileage of the entire system, shows an average number of passengers per mile of 2,698,782 for the twelve months, a monthly average travel per mile of 258,232, and a daily average of 8,608. This, of course, was as unequally distributed as the hourly travel, but we have no means of computing it further. The traffic of the roads for the preceding year, which closed September 30, 1881, was 75,575,245, and for the twelve months ending on the corresponding date, 1880, 60,831,759. The travel of the year just closed exceeds that of its immediate predecessor by 10,785,784, and that of 1880 by 26,529,270 passengers."

## Direct Positives.

A gelatine plate is exposed in the camera about double the ordinary period, and then developed in the usual way with ferrous oxalate. The development is continued, indeed, until the back of the plate is completely black. About ten to twelve minutes are generally required to bring about this result.

The plate is now perfectly black on both sides. A two per cent solution of chromic acid, or a solution of one gramme of bichromate of potash and five grammes of nitric acid in one hundred grammes of water, is then poured over the unfixed plate until the black color has disappeared, and a bright image composed of pure chromate of silver is produced.

The plate is then further treated in daylight. To remove all the chromate of silver, it is washed with very dilute ammonia, say one part of the latter mixed with one hundred parts of water.

Finally, the plate is again laid in an oxalate developer, and this is permitted to act until the desired vigor is obtained. If the plate gets too vigorous, the action of the developer is at once suspended, and the image is washed and fixed. An emulsion poor in gelatine is employed; if there is much gelatine in the film, the manifold operations to which the plate is subjected naturally enough lead to difficulties, such as frilling, creasing, etc., of the film. In fact, the great thing is to work with a film containing as little gelatine as possible.

At the last meeting of the Berlin Society for the advancement of photography, a number of plates produced by this process were submitted to the meeting, and invoked universal admiration. It was then remarked that the method was an improvement of Jaehn's plan of producing direct positives, which, our readers may remember, we published in these columns about two years ago. It is very frequently of importance to secure a negative direct in the camera, and another negative, especially in the case of enlargements, and this new method affords an easy plan of doing so.—*Herr Obernetter, in Mittheilungen.*

EVERY corpse that is taken to the Paris Morgue is now quickly converted into a block almost as hard as stone. This result is obtained by Carré's chemical refrigerator, which is capable of reducing the temperature of the conservatory, where each body is laid out on something closely resembling a camp bedstead in stone, to 15° below zero centigrade. At the back of this room is a row of stove like compartments, in which the corpses are boxed up and frozen hard before being exposed to public view. As an illustration of the intense cold thus artificially secured, a Paris journalist, in describing a recent visit to the Morgue, says that in opening one of the compartments the attendant took the precaution to wear a glove, lest "his hand should be burnt by contact with the cold iron." The corpse which was taken out of its receptacle had been there nine hours. The doctor who accompanied the visitor struck the dead man on the breast with a stick, and the sound was just as if he had struck a stone.