## Scientific American.

Judge Kane's Decision on Telegraphs. MESSRS. EDITORS-I noticed your comments in your paper of the 15th ult., respecting the Telegraph Case; and being of the opinion that you desire to give correct views in regard to rights and titles of inventors, I beg leave to offer a few remarks. You say, "the invention of Mr. Morse consists in this, that he transmits messages to a distance, using the mechanical action of an electro magnet to do so by making marks." " The Chemical Telegraph consists in transmitting messages to a distance, not using mechanical action, but chemical, to do so, by making marks."

The application of electricity to a wire, or to rods of metal, and the discovery that it will travel from one end to the other, is of ancient date; Morse makes use of this ancient discovery for the purpose of making marks at a distance, to denote the letter of the alphabet, thereby conveying ideas or language through miles of space. The apparatus consists of three principal parts, namely, the two machines and the wire which extends from one machine to the other.

We hear of signals being given at a distance by electricity, previous to the invention of Morse, but we never hear of an answer being returned by the same apparatus. Neither do we hear of the alphabet being transmitted to a great distance and recorded in suitable intelligible characters, by the employment of electricity, until Morse made the invention and produced the result. Morse made the telegraph double-acting, that is, to transmit messages both ways. You are in error in saying that "Morse uses the magnet in transmitting messages." The magnet has nothing to do with transmitting messages, it merely acts to record messages transmitted by electricity; and Bain demonstrated that the magnet is not even necessary for that purpose, but that fact does not give Bain a title to use other parts of Morse's invention. The object designed and result produced, by both Telegraphs, are the same (that is, to transmit messages), and the working instruments, in both cases, are precisely the same: that is, the marks are made by the point of a metallic instrument in both cases. The distinctive features of the respective inventions of Morse and Bain are the following : Morse marks the paper by an indentation; Bain marks the paper by coloring it without an indentation; Morse's marking instrument acts by moving; Bain's marking instrument acts without moving; Morse uses two conducting wires,-Bain uses one conductting wire. In both cases the paper, prepared to receive the impression, is moved under the marking instrument by machinery, prepared for the purpose, with equal regularity in each rough stick placed and turned in the branches machine.

Morse's invention is valuable, and his title is good, if his claims are rightly made; Bain's invention is valuable and his title also good, if hand. All the machines which have since his claims are rightly made; but Bain cannot been made for the same objects, are for imlawfully use any part of Morse's invention without his consent.

ly, he has not "taken Bain's invention from sage to a friend, by the use of machinery, prohim and given it to Morse," as you assert, he has decided correctly that the use of the Telegraph, called Bain's Telegraph, has infringed Morse's patent. Notwithstanding this decision, Bain's invention is undoubtedly an improvement on Morse's invention, and as such he is justly entitled to a patent, and if the two inventors cannot agree to use their respective to use Morse's invention.

The Commissioner referred him to the inven- ticulars, &c.) tion of Morse, stating that it was an improvement on it, and, as such, he was entitled to a messages by making marks to represent the

result," and as the two machines were differently constructed, the Judge reversed the decision of the Patent Office, and ordered the patent to be granted. This decision of the Hon. Judge was probably correct, according to the evidence before him. This decision was undoubtedly rendered in consequence of the defect of Morse's claim; if he had simply claimed the employment of electricity on transmitting wires, in combination with a recording instrument, for the purpose of making marks at a distance, on paper or any other substance, to designate the letters of the alphabet, without resting his claim on any particular construction of machinery for that purpose, the Court would have understood his invention and claim, and would not have granted Bain a patent for a machine to produce the same result, by the same means employed. The transmitting and recording being the subject matter of novelty in Morse's invention, he was not, therefore, necessarily confined to any particular or definite construction of machinery for that purpose. It is very injudicious to make use of the words " art, process, product, or principle," in any claim to an invention, as those words have a very indefinite meaning, when applied to any combination of machinery to produce any result what ever.

Your remarks respecting the art of printing as a similar case to the telegraph, are not arguments. The art of printing (as a mechanical art) consists in multiplying copies by using one or more instruments, to give and repeat the same impression on any suitable substance. If this invention could have been patented at the time it was invented, under laws like our own, it would have included the representation of anything and everything that could be represented by printing; that is, the simple combination of the coloring material with the substance colored, by the employment of instruments prepared for the purpose of multiplying copies of the same thing, whether the thing be the letters of the alphabet or the representation of men, animals, landscapes, or anything else, and all the improvements that have been made in the art, since the original invention, consists in improving and perfecting the type-plates, &c., the ink or coloring material, the substance on which the impression is to be made, and the instruments and machines to give the impression.

The various processes you spoke of as different arts or inventions, are merely branches of the original invention.

The person who first spun a thread made an original invention, even if his spindle was a of a tree; and the man who first invented weaving probably tied his threads to the branch of a tree, and put in the filling by provements on the original inventions; and the man who first grasped electricity, and sent second inventor and patentee, he possesses If I understand Judge Kane's decision right- it across the country with an intelligible mesduced a new and original invention, and all inventions made afterwards for the same object, employing the same messenger, must be | page 9), "it is therefore recommended that no for variations of the original machinery to produce the same result, whether they are actual improvements on the original invention therefor be made within two years from the or immaterial variations or alterations.

If the invention of Morse had been of aninventions in connection, Bain cannot lawfully cient date, and had become public property, use his invention without first obtaining a right; then the invention of Bain would have been patentable as a distinct invention, without any When Bain applied for a patent, it was the reference being given respecting the original discover the defect of his claim until he disduty of the Commissioner to grant it, or refer inventor; his claims would be good by simply him to something in the Office that would ren- claiming his invention to be an improvement these two years are no longer time than is ne der his title to a patent invalid, if granted. on the Electric Telegraph (specifying the par- cessary for the pirater to prepare for the bu-

The Telegraph patented by House records patent, but decided that his claims interfered precise form of the letters of the alphabet; it with the invention and claims of Morse. Bain is also an improvement on the original inveninsisted on his claim to a patent for a distinct tion, and as such is justly entitled to a patent. law, by informing Mr. Bain that his claims invention; this claim was justly refused by The principal subject matter of novelty, in interfered with the invention and claims of the Commissioner, consequently Bain appeal- this invention, consists in making the points of Mr. Morse. The late decision of Judge Kane ed from the decision of the Office to the Chief, the recording instruments to represent the ac- confirms this decision of the Office. Justice of the District of Columbia (the Judge | tual letters of the alphabet, instead of repredecides cases by the evidence before the senting them by marks, but he uses the same by saying to inventors, "there is nothing new Court). In this case the Judge decided that combination of the transmitting wire with or patentable in your invention," without even "a patent cannot be granted for a principle the recording instrument, which is the sub-"stating that it would interfere with any other nature.

Morse.

By the provision of the Patent Law, as it now stands, both Bain and House can surrender their patents and demand a re-issue with an amended claim, embracing only what they invented, and they will find protection in all cases where their inventions are used by those who hold a right to use Morse's invention. This provision for the amendment of claims is a saving clause in the Patent Law, and constitutes one of its best features. All patents of the most important inventions, which have been patented, would have been rendered invalid, and would have ruined the inventors by costs of law suits, in trying to support their rights, had it not been for this saving clause. This fact must have been well known to Commissioner Ewbank when he recommended Congress to pass an act to take all inventions from inventors "after two years," if their claims should prove defective by "inadvertence and mistake;" he undoubtedly had some particular case or cases in view at the time he made this recommendation, in his Report to Congress—perhaps this very case of Bain was one of the number; he goes still further, and explains his object-that is, to destroy the title of the original inventor, and give his invention to the pirater of patent rights, for whom he expresses great sympathy, designating him as the second inventor; here are his own words, which may be found in his Report to Congress for the year 1849 (Doc. No. 20, page 8 and 9), "the law now permits what is termed a re-issue, embodying matter not claimed in the original patent, if shown by the model and drawings. The device having been a part of the first construction of the machine, is now claimed; and, having been new at the date of the original application, a right to its exclusive use is demanded;" he further says, "a system of tribute is in this way levied, originating with the indefatigable explorer of old and useless patents, whose object is to discover something which they may now claim under the law, and which can be used to legal advantage, in defiance of equitable right, thus operating against a beneficial invention, containing the same features subsequently patented." The honorable gentleman does not tell Congress how such "subsequent patents," for the same thing, are obtained. He certainly ought to have credit for his peculiar penetrating sagacity, in discovering that the original inventor does not know the merits of his own invention until "the indefatigable explorer of old and useless patents" brought the thing to light. Here is certainly an original idea, and the Hon. Commissioner ought to have credit for it. He has introduced a new kind of business-a new occupation, " to explore old and useless patents." He has made another new discovery, which he has given to the world, free gratis, through his. Report to Congress, that is, if the first and original inventor and patentee prosecutes the "legal advantage, in defiance of equitable rights;" and in consequence of this wonderful discovery, he makes the following recommendation to Congress (see his Report, Ho. Doc. re-issues, containing a claim broader than the original claim, be granted, unless application date of Letters Patent." If this recommendation should be adopted and become a law, all the patent pirater has to do is to wait two years, when he can infringe with impunity, as he well knows that the inventor would not covered it on a trial for infringement; and siness, while the inventor is spending his time and money in his exertions to introduce his invention and make his merits known.

The former Commissioner acted justly and honorably, agreeably to the provisions of the

The present Commissioner acts the reverse,

nor for the application of a principle, nor for a ject matter of novelty in the invention of patented invention, if granted; such cases have been appealed, and his decision reversed. HERRICK AIKEN.

Franklin, N. H.

[Without making too long an article of this, ve could not answer some of the points in which we believe Mr. Aiken is in error,-but shall do so, briefly, next week.—Ed.]

## Resuscitation of Frozen Fish.

We have received a great many communications on this subject, all of them corroborating the statement, "frozen fish will come alive again when placed in a tub of water." Quarterman & Son, this city, informs us that the fish in the streams of Westchester Co., N. Y., are frequently caught, thrown out, left to freeze, and are resuscitated when thawed. Mr. Cumings Martin, of Taftsvslle, Vt., caught suckers out of White River, Vt., flung them on the ice, allowed them to be there for hours until they were apparently frozen through, and would rattle in the basket like pine knots. When thawed out in cold water, they would wriggle and move about as good as new. J. H. Bacon, of Westchester, Mass., says he has taken Tom Cod out of the river, allowed them to freeze, carried them to Boston and has seen them come alive when thawed. William Rummel, of Jersey City, N. J., caught a some perch in the Hackensack river, in 1836, which froze quickly, he carried them to market which was very dull, he then packed them in snow for three weeks, and after this, when applying pump water to them, every twenty-five in thirty swam about in the tub. He says if fish be frozen in moderate weather, and take a long time to do so, they will not return to life. Robert Pike, of Wakefield, N. H., says he has caught brook trout in January, which froze through in a few minutes, and which, after five hours, when he took them home and put them in a tub of cold water, swam around quite lively. Thomas Power, of Hudson, N.Y., says he has seen fish which were frozen as hard as rock come to life when thawed in cold water. The fish were yellow perch found in the Hudson river. D. H. Quail, of Philadelphia, noticing the statement of Prof. Lathrop, says he has caught fish in N. J. near Fortescue's Beach, in Delaware Bay, in winter, in the following manner, which is interesting; he says, "having procured a small boat, we dragged it into the ponds that were formed on the marsh by high tides, and which were frozen over nearly hard enough to bear the boat; then commenced the sport; one would stand in front to break the way, another push the boat along, the third with a small crab net would scoop up the fish which could be seen upon the bottom frozen as stiff as bones-they were all large perch. I caught half a bushel, which, when taken home and put into a tub of cold water from the well, in a short time were swimming about quite lively. Mr. B. M. Douglass, of East Springfield, Conn., says he has caught perch, pickerel, trout, and carp, in winter, allowed them to freeze, carried them for miles, and when thawed out in well water, not one in six but would come to life. He adds, they can be carried to any distance if kept frozen, but if not frozen quickly after being caught "they will not come too," this he has always noticed. By this, it appears that if a considerable time elapses between the period when the fish is taken out of the river and thawed they cannot be resuscitated. Ransom Cook, of Saratoga, N. Y., a very observing man, adds a new fact to this store of information on the subject. He says, that all fish which have been frozen and resuscitated, have their sense of sight destroyed-they all become blind.

## To Make Mice Decamp.

A correspondent informs us that if the places infested by mice, their holes, &c., be treated to a plentiful supply of Scotch snuff, they will make tracks for other regions. We have never tried the experiment ourselves, but it can be easily and cheaply tried. Those who are troubled with mice should make the experiment. We have a few running about our office, they are handsome, sleek little things, and do no harm as they are well provided for. We hate rats, but mice are beautiful little animals. The tree mouse and the shrew are among the prettiest specimens of animated