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**THE SCIENTIFIC AMERICAN SUPPLEMENT**

**No. 168,**

**For the Week ending February 15, 1879.**

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## THE NEW PATENT BILL AS PASSED BY THE SENATE.

An Act to Amend the Statutes in Relation to Patents (Senate Bill 300) has been passed by the Senate, and is now before the House of Representatives for its approval. As the adjournment of Congress is fixed for the 4th of March, the bill must soon be acted upon, or it will go over to the next Congress. The bill as it stands, while it contains some very excellent provisions, presents others that are very obnoxious; and unless the bad points can be eliminated we hope the subject will be postponed for the consideration of the new Legislature.

We will briefly recapitulate what to us appear to be the leading designs of the present bill, with a few words of running comment. In all there are 25 sections.

Sec. 1 provides that damages shall not be recovered for infringements that were alleged to have taken place more than four years prior to the commencement of the suit.

As the law now stands the owner of a patent may sue infringers at any time when he can find out that an infringement has taken place. But under the new provision, if the infringement is concealed or in any way escapes the knowledge of the patentee for four years, he has no remedy, and the infringer goes free. This section is an encouragement to infringers, is an injustice to patentees, and should not be passed.

Sec. 2 takes away from the inventor, substantially, the control and exercise of the patent for his own invention, and gives away to others the right to use the patent, against the consent of the patentee, for a price not agreed to by him, but fixed by people adverse to him, by means of the formalities of a court.

The existing law vests the exclusive proprietorship of the patent in the inventor, during the brief period of 17 years for which it is granted. This is one of the most satisfactory provisions of the present statute, and should be carefully preserved. If the new provision passes no man can hereafter say that he "owns" a patent. He will simply own a certificate showing that somebody else has the right to make use of the products of the inventor's ingenuity without so much as asking his leave.

Sec. 3 provides that if the inventor has the hardihood to bring a suit against an infringer and clearly proves the infringement, should the infringer then wriggle around and debar the inventor from getting a judgment for a sum less than twenty dollars, then, in that case, the inventor shall pay his own costs of the suit and also the infringer's costs.

This section practically imposes a heavy fine upon an inventor for attempting to stop infringements.

Sec. 4 gives conditional privileges to infringers to continue their infringements after a verdict is rendered against them, during the pendency of their appeals.

Sec. 5 gives to infringers the privilege of procuring the removal of injunctions, so that they may continue to infringe.

Sec. 6 provides that no re-issue shall be granted unless applied for within seven years from the date of the patent.

The present law permits the inventor to correct his patent by re-issue at any time during the life of the patent; this is an excellent provision, and tends to give value and vitality to property in patents. The provision of the new law assists and encourages the infringer.

Sec. 7 provides that if an inventor's specification happens at first to be so defective that an infringer can make and use the device without liability, the said infringer may always continue such use, without payment to the inventor, even after the latter procures a re-issue with properly corrected specification and claims.

Under the present law, if the original patent is found defective and the claims insufficient to prohibit infringements, the inventor may at any time obtain a re-issue, which shall be good for the remaining term of the patent, during which remaining term infringers must pay damages. The new provision aids and supports infringers throughout the entire term of the patent, and prohibits the inventor from recovering damages.

Sec. 8 provides a remedy where two persons have unwittingly taken a patent in their joint names, when only one of them was the real inventor.

Sec. 9 provides for the taking of testimony relating to patents, which may be stored away and used in new cases after the witnesses are dead and gone.

This appears to be another of the many provisions of the bill intended to assist infringers.

Sec. 10 provides that infringers may bring suits to have patents declared void.

This provision appears to be intended to help infringers in breaking down patents that stand in their way, but which belong to poor inventors who cannot defend such suits, or patents granted to those who are absent or deceased.

Sec. 11 requires that patentees who have requested infringers to stop such infringement, shall commence suits for damages within a reasonable time; otherwise the infringer may continue the infringement during the entire term of the patent, without liability to the patentee.

The majority of patentees are poor people, who in many cases have not the means to bring suits against infringers, and all they can do is to request the latter to desist or pay royalty; reserving until a future time, when their means admit, the bringing of suit.

The law, as it now is, permits a poor man to bring his suit for infringement whenever he desires. The new provision appears to be aimed against the inventor, and in favor of the infringer.

Sec. 12 provides that patent fees shall hereafter be paid as follows: $35 on the issue of the patent, $50 in four years thereafter, and $100 in nine years thereafter; total, $185 for each patent. Failure to pay either of the two last fees nullifies the patent.

Under the present law the fee for a patent is only $35. No other taxes or penalties are imposed. The proposed law introduces the European system of multiple taxes, and imposes a heavy burden upon the inventor. This subject will be found more fully discussed in another part of our paper.

Sec. 14 regulates the issue of licenses by joint owners and patentees. 15 provides punishment for fraudulent or deceptive conveyances of patent rights. 16. Commissioner and assistant to give bonds. 17. Prices of printed copies of patents authorized to be increased. 18 relates to certified copies of patents. 19 relates to payment of final fee in allowed cases. 20 regulates issue of patents for inventions previously patented in foreign countries. 21 permits full owners of patents to obtain reissues in their own names. 22 regulates the renewal of lapsed allowed cases. 23 regulates the stamping of date of patent on patented articles. 24 regulates the issue of patents in interference cases. 25 repeals all conflicting laws.

It will be seen from the brief comments here presented, that in our view the passage of the new law will make a very radical change in the existing system, and that its practical working would probably be disadvantageous to inventors and patentees. At the same time it must not be forgotten that patents are monopolies, which, though on the whole of great benefit to the nation, are in some cases very annoying to the public, and very burdensome and disastrous to many private interests. Perhaps the present laws can be modified so as to remove some of these difficulties. But the remedy proposed by this bill is worse than the disease. It seems unfair to enact a law like this, which in so many of its principal provisions appears to be designed to sweep away from inventors all personal benefits from the fruits of their ingenuity, and bestow them, free of charge, upon infringers.

We hope that all who are opposed to the new law will promptly use their influence with members of Congress to prevent its passage.

## WILL BLOOD TELL?

Some five years ago, Dr. Heitzman announced, in the *Medical Record* of this city, an important discovery in respect to the anatomy of protoplasm. He claimed that protoplasm of every description invariably contains a network of threads and granules inclosing a fluid, and that the threads and granules constitute the living matter. This view he now asserts has been accepted by more than a dozen of the best microscopists abroad, although it has not yet been recognized in this country; and he makes it the basis of an announcement which, if satisfactorily demonstrated, cannot fail to have a marked and beneficial effect upon the practice of medicine—the announcement that a drop of a man's blood under the microscope will tell just what his condition and constitution may be.

A protracted study of the pus corpuscles in urine, in connection with clinical histories, led Dr. Heitzman to the conclusion that the constitution of a patient could be determined by such examinations, the pus corpuscles of a healthy and strong person containing a greater abundance of living matter than those of a person enfeebled by disease or otherwise. He next extended his investigations to the colorless blood corpuscles, suspecting that by their examination also he might be able to determine the constitution of the individual furnishing the blood. His expectation was verified, he says; an abundance of large granules going with a good constitution; on the other hand, if the granules were few and fine, or the entire body of the corpuscle pale, it was evidence of a poor constitution. He frequently noticed that the number of white blood corpuscles was considerably increased after a single sleepless night, so much so that it might be determined whether a man had been kept from his rest or not, by examination of his blood. It could also be determined whether a man was to have acute diseases, or whether he was to suffer from the slow processes of disease incident to a strumous diathesis.

A committee of physicians has been appointed to investigate and report on this most promising subject. If it proves possible to determine a man's physical constitution by the examination of a drop of his blood a new field of investigation will be opened, and one having very important practical bearings.

## AMERICAN TEA.

Over fifty thousand tea plants have been distributed lately in the Middle and Southern States, by the Bureau of Agriculture. In three or four years these plants will be large enough to permit a full picking of the leaves. Experiments have been made with tea leaves grown in the grounds of the department and in the South, after Japan methods, the product being pronounced an excellent Oolong by dealers and experts. The only present obstacle to the profitable cultivation of tea in this country on a large scale is the amount of hand labor required in curing the leaves. The Commissioner is confident that American ingenuity can produce machinery by means of which the preparation of the leaves may be effected better and cheaper than is possible even with "Chinese cheap labor." There is no good reason why any family having a garden plat, in the southern and middle portions of the United States, should not produce with little trouble all the tea needed for home consumption, without elaborate machinery.