

INFORMATION USEFUL TO PATENTEES.

From inquiries repeatedly made of us as to the rights of minors and women who secure patents, and as to who are the legitimate owners of inventions issued under various circumstances, we are inclined to believe that a few items of information under this head will interest our inventor readers at least:—

RIGHTS OF MINORS.

A minor can take a patent in his own name, but it is subject to the control of one of his parents or his legal guardian, the same as any other property that may come into his possession.

By the laws of the United States, as well as Great Britain, minors, until they are twenty-one years of age, are not considered competent to do business. Minors could not, therefore, legally transfer a patent; neither could the parent or legal guardian do this in case the term of the patent should extend beyond the time when the minor becomes of age. There are difficulties connected with the transfer of patents granted to minors which appear never to have been settled.

WOMEN'S RIGHTS.

Women can also apply for and obtain patents upon the same terms as the sterner sex. We frequently take out patents for ladies; but they do not exercise their ingenuity as much as they ought. If the woman-patentee is of age she can transfer a patent legally, and enjoy all the rights and privileges of anyone.

CURIOUS QUESTION ABOUT OWNERSHIP IN PATENTS.

Many employers think themselves entitled to all inventions made by persons in their service. This is not so unless there is a stipulation to that effect; and it is high time that employers should abandon such unjust pretensions. No inventor need fear of thus losing his right, unless it can be proved that he was employed expressly to bring out such invention for the benefit of his employer.

In regard to inventions made by slaves, it has been the practice of the Patent Office to reject such applications, as they are considered legally incompetent alike to receive the patent and to transfer their interest to others. In reference to free colored men, we believe them also to be incompetent to receive a patent, as under the United States Laws they are not regarded as citizens, and could not therefore defend a patent against infringers in the United States courts.

JOINT PATENTEES.—RECORDING ASSIGNMENTS.

There are three classes of assignments that must be recorded at the Patent Office within three months from their date, in order to insure their validity against subsequent purchasers without notice. These are, first, an assignment of the entire patent; second, an undivided portion of a patent; third, the sale of an exclusive right, under a patent, for a particular territory. Illustration: If A, having already sold a patent to B, turns knave and makes a second sale of the same property to C, who records it, (B having omitted to place his assignment on record within three months, and C having no knowledge of the sale to B), then the assignment to C will be held valid, and that to B becomes null; B's only remedy being a suit for fraud against A.

We are very frequently asked the following question: "A, B and C each own an undivided third-interest in a certain patent. Can A proceed to manufacture and sell the patented article whenever he chooses, without the consent or without accounting to B and C as to the proceeds?"

In answer we say that A can proceed, without consent, to manufacture and sell the patented article whenever he pleases. Whether B and C can procure an order from the Court compelling A to give bonds that he will account for profits and set apart a third share thereof to each, under the direction of the Court is a question as yet undecided.

The opinion, however, prevails that one of the owners in a joint patent may use the invention, freely, for his own benefit, so long as he does not debar the others of the right to do the same.

If an assignment of the invention is made at the time of the application, and the case is rejected after examination, and the inventor or his attorney afterward succeeds in securing the issue of the patent, by appeal or otherwise, this issue does not, as some have supposed, render the transfer invalid. The same remark also applies to a case which may have been withdrawn, and resubmitted and patented under a new application.

RECENT AMERICAN INVENTIONS.

The following inventions are among the most important of those for which patents have recently been granted, and which will be found recorded in our list of Claims.

Planing Saw.—In circular saws intended to saw and plane at a single operation it has been found exceedingly difficult to preserve the planing knives in an effective working condition, owing to the severe lateral stress to which they are subjected. In the above invention guides or supports are secured to the cutters, projecting radially beyond them in the plane of the saw plate, and working in the kerf cut by the ripping teeth. By this means the cutters are effectually preserved from deflection and breakage. The merits of this invention are due to William S. Winsor, of Port Orford, Oregon.

Combined Tent, Overcoat and Cape.—The object of this invention is to combine a tent, overcoat and cape in such a manner that the parts may be compactly folded, carried in the knapsack, be extremely light and capable, with a slight manipulation, of being used in any of the capacities above specified, so that a soldier may be protected in storm while on duty during the day, and be provided with a suitable covering at night. This ingenious article was invented by Henry J. Phillips, of New York city.

Friction Clutch.—The object of this invention is to so provide and apply friction surfaces within a pulley, or its equivalent, that the friction may be brought into action in a more effective manner than in the friction clutches heretofore used. With a view to this end the invention consists, firstly, in the use within a pulley or its equivalent, of segments of metal so combined with a sleeve fitted to slide on the same shaft on which the pulley is placed, that by a sliding movement of the said sleeve upon the shaft the said segments may be forced radially outward against the inner periphery of the pulley and so caused to produce friction by which rotary motion may be imparted from the pulley to the segments, or vice versa; and it consists, secondly, in so applying such segments in combination with the shaft and pulley, or its equivalent, that the centrifugal force developed in the segments by their rotary motion shall be allowed to force them outward against the inner periphery of the pulley, and so be productive of friction between the segments and pulley, and made instrumental in or accessory to the transmission of rotary motion. This invention is by Wendell Wright, of New York city.

Projectile.—This invention consists in the construction of a projectile for ordnance with its body composed of a single casting of iron, and a surrounding ring of lead or other soft metal or suitable material capable of lateral expansion, such casting being of such form that the force employed to ram it home in loading, or the force to which it is subject in its discharge, will cause it to be broken in two or more pieces, which will act in such manner as to cause the said ring to be so expanded as to fill the bore and enter the rifle grooves of the gun. It also consists in providing the hard metal portion of the body of a projectile, with projecting collars on each side of its expanding ring, for the purpose of confining the ring in a longitudinal direction, and preventing the formation on the said ring of uneven edges, which tend to deflect it from its true trajectory. It also consists in enveloping the packing ring of soft metal with a band or patch of copper or brass, corrugated longitudinally, to provide for its expansion in a circumferential direction. This invention was patented by I. P. Tice, of New York city.

Pump Attachment.—The pistons of atmospheric pumps frequently become dry, especially if used only at intervals, and as quite an imperfect vacuum can only be found when the piston is dry, considerable time is consumed in pumping before the water is raised and the pump rendered capable of operating perfectly. In many cases it is necessary to pour water into the pump in order that the packing of the piston may swell tight before water can be raised. The object of this invention, patented by John W. Lane, of Newton, N. J., is to obviate this difficulty, and to this end he attaches a water chamber or reservoir to the induction pipe of the pump near its junction with the pump cylinder, said chamber being sufficiently large and in such close proximity to the pump as to supply or fill the latter when the piston is operated, and en-

sure the perfect action of the piston almost immediately, even if its packing be quite dry.

Padlock.—The object of this invention is to obtain an unpickable padlock of simple construction, and consists in the employment or use of a dog so combined with a guard bar that the latter will keep the former firmly in proper position, and the key, in unlocking the lock, made to act directly on the guard bar or a pendant thereof, the two parts aforesaid forming a simple and efficient means for securing the shackle in the lock. The invention also consists in the employment or use of certain parts, so arranged as to retain a false key if inserted in the lock, so that said key cannot be withdrawn, and by being retained in the lock not only serve as a means to prevent further efforts to pick the lock, but also serve as a means to lead to the detection of the party who made the effort to pick or illegitimately open the same. The above described lock was patented by Thomas Slaughter, of Newark, N. J.

Fire Escape.—This invention, patented by Aaron Shute, of Flushing, N. Y., consists in the employment or use of a flexible or chain ladder applied to a balcony of a building in such a way that the ladder may, in case of fire, be released in a moment of time by an inmate of the dwelling, and at various parts of it, and the ladder allowed to descend to the earth, affording a ready means of escape for the occupants. Patents have been applied for in England and France for this invention.

Thanks to our Cotemporaries.

To the newspaper press in the Northern and Western States we are indebted for very many excellent notices of this paper. Probably no other weekly publication was ever favored so extensively in this respect, and we take this occasion to thank our cotemporaries for the editorial courtesies they have extended to us during the sixteen years we have published the SCIENTIFIC AMERICAN. The two following are but specimens of hundreds equally complimentary, which we have clipped from our exchanges. The *Herald*, published at Winsted, Conn., says:—

Among our numerous exchanges we have no greater favorite than the SCIENTIFIC AMERICAN. Keeping closely to its proper sphere in mechanics; always instructive but never pedantic; always practical and nowise visionary; and, better than all, holding stiffly to the interests of its readers and the public, impartial, never selling its opinions or surrendering them to the interests of outside parties, it is altogether a model journal. Fretted, tired and sick of the continuous roll and rub-a-dub of politics in the common herd of newspapers, it is refreshing now and then to take up a sheet which subserves the interests of the people and the race, instead of those of a mere candidate or party. Then, again, the SCIENTIFIC AMERICAN is unquestionably foremost and first in its class. The mechanic who cannot afford to subscribe for it is unfortunate indeed.

The *Press*, published at LaSalle, Ill., appreciates the SCIENTIFIC AMERICAN, and says:—

Among all the different newspapers of this country, we think we are justified in the assertion, that the SCIENTIFIC AMERICAN, published by Munn & Co., New York, is justly entitled to be ranked among the very best. Certain it is that no one weekly paper contains more useful information for all classes of readers than this ably-conducted journal. Particularly at this time is it of great value. The able, decided position it has taken in defence of the national government in this trying hour, its faithful record of the progress of the war, its scientific articles upon the different weapons introduced in modern warfare, its numerous engravings, its correct list of all patents issued—makes the SCIENTIFIC AMERICAN of almost incalculable value to the American reader. As regards typographical execution, neatness of print, quality of paper, &c., it has no superior. Every farmer, manufacturer, mechanic, artisan, inventor and tradesman should have it.

TO OUR EDITORIAL BROTHERS.

We send a copy of this week's issue of the SCIENTIFIC AMERICAN to every newspaper published in the United States accessible to us through the mail facilities of Uncle Sam, and we take this occasion to thank our brethren of the press for their uniform courtesy toward us ever since we commenced the publication of this journal. Your friendly aid, thus cordially extended, has aided us materially. We acknowledge it with gratitude, and still further appeal to you to speak a good word to your readers in our behalf. To all such journals as publish our prospectus we shall send the SCIENTIFIC AMERICAN one year without an exchange, and would be glad to have such papers as do so sent marked to our office.

The *London Times* declares that while steam navigation has been a scientific success it has been a pecuniary failure, inasmuch as all the lines of ocean steamers require enormous appropriations from the government to keep them afloat.