

## IMPROVED SELF-ACTING WAGON BRAKE.

In traveling through the country nothing, in vehicles, is more noticeable than the almost universal introduction of brakes. They are to be seen not only upon all stages and heavy wagons, but on many private carriages. This extensive demand for this article is a perpetual stimulus to inventors to make improvements in its construction, and we are procuring a constant series of patents for inventions in this department.

The brake illustrated in the accompanying engraving is of the self-acting class, and at the same time it is capable of being operated by hand, at the will of the driver. The hole in the pole, A, by which it is attached to the hounds, B B, is made oblong, so that the pole may slide back and forth in the hounds. The lever, C, is secured to the forward axle, D, in the manner shown in Fig. 2, having its fulcrum at E. When the pole is pushed back, as it will be in going down hill, its end presses the lever, C, upward and thus draws forward the rods, F and G, which actuate the brakes. A friction roller is interposed between the end of the tongue and the lever, C.

For operating the brake by hand, a ring is secured to the lever, C, and a strap, being fastened to this ring, is

brought up within convenient reach of the driver. When it is desired to back the wagon, the brake is rendered inoperative by pressing the lever, C, so that its end may catch under the loop prepared for that purpose on the upper side of the pole.

Many self-operating brakes have been invented, but this is the only one we have seen which is automatic and, at the same time, capable of being operated manually.

The patent for this invention was procured, through the Scientific American Patent Agency, July 24, 1860, and persons desiring further information in relation to it will please address the inventor, H. W. Norville, at Livingston, Ala.

**SEWING MACHINES—GREAT PATENT CASE.**—“On the 31st ult. (as reported by telegraph), Judge Dunlap, of the United States Circuit Court, Washington, decided, on appeal from the Patent Office, that Akins and Felthousen were the first inventors of the wheel feed in sewing machines, ordering a re-issue of their patent to James G. Wilson, their assignee. This re-issue was opposed by I. M. Singer & Co., who claimed to have made the invention in 1850, while the judge decided that Akins and Felthousen made it in the early part of 1849.” Mr. Wilson, as assignee, applied, on the 8th of December, 1858, for a re-issue of the patent of Akins and Felthousen, which had been originally granted on the 5th of August, 1851. This was declared by the Commissioner of Patents to be an interference with the patent of I. M. Singer and, in the trial which resulted, the re-issue was refused to J. G. Wilson, by the Commissioner. This decision of the Commissioner having been appealed from to Judge Dunlap, it has been reversed. This whole case has become very complicated, and is mixed up with the interests of other patentees whose names are not given above. The specification and drawings on which this appeal was taken were prepared at this office.

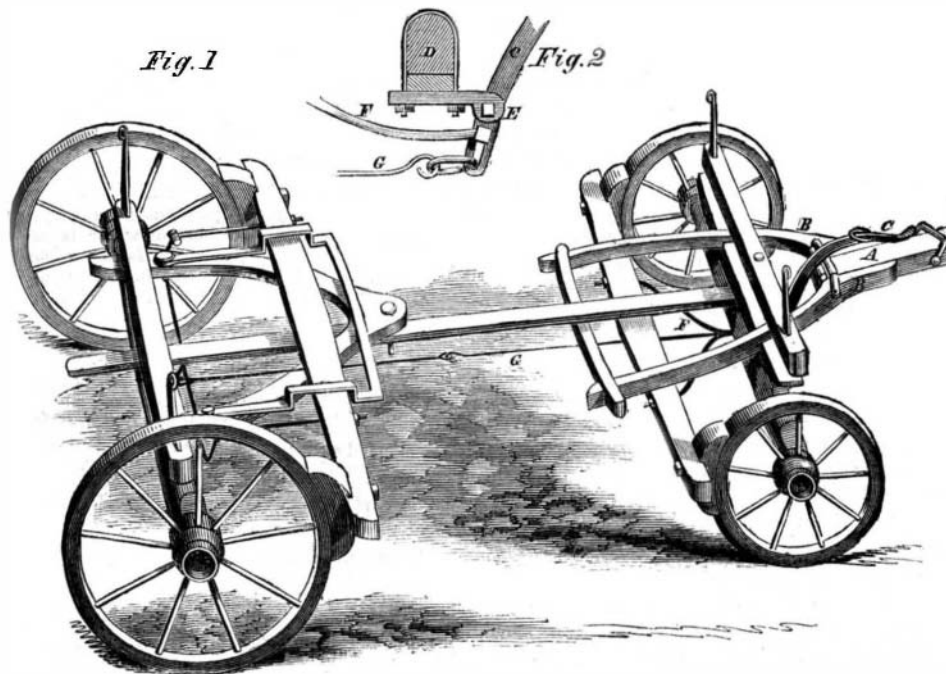
## PATENT RIGHT FOR TANNING WANTED.

Messrs. Editors:—Looking over a file of old papers, I noticed a statement that one-half a patent right for tanning leather was sold in New York for \$300,000. I am just starting the tanning business here, and any information I can get in relation to the best mode of sinking a tan-yard and saving labor would be thankfully received and liberally paid for. Perhaps some of the patentees are in New York; if so, I would

of this city, but which has been considerably improved by Wm. J. Innis, of Providence, R. I. Several of these clutches are in operation in the vicinity of Providence, some of them in driving heavy water-mangles requiring 20 horse-power, and they are said to give entire satisfaction.

A is the shaft upon which is placed the loose pulley, B, which is made in the usual manner and turned on its inner surface. C is a plate or disk made fast to the

shaft. D D are ribs cast on the face of the disk into which two segments, E E, are dovetailed so as to slide easily; the segments, E E, are made of the same circle as the inner surface of the pulley. F is a thimble fitted loosely to the hub of the disk, C. H H are diagonal rods or braces which connect the thimble to the segments, E E. The diagonal rods or braces are made adjustable by means of a right-and-left screw, so as to get any amount of friction to carry the machine. When it is desired to start the machine, the thimble is moved towards the disk by means of a lever which fits into the groove, I. This causes the segment to press into the pulley, so as to cause sufficient friction to carry the machine. When it is desired to stop the machine the thimble is moved from



NORVILLE'S SELF-ACTING WAGON BRAKE.

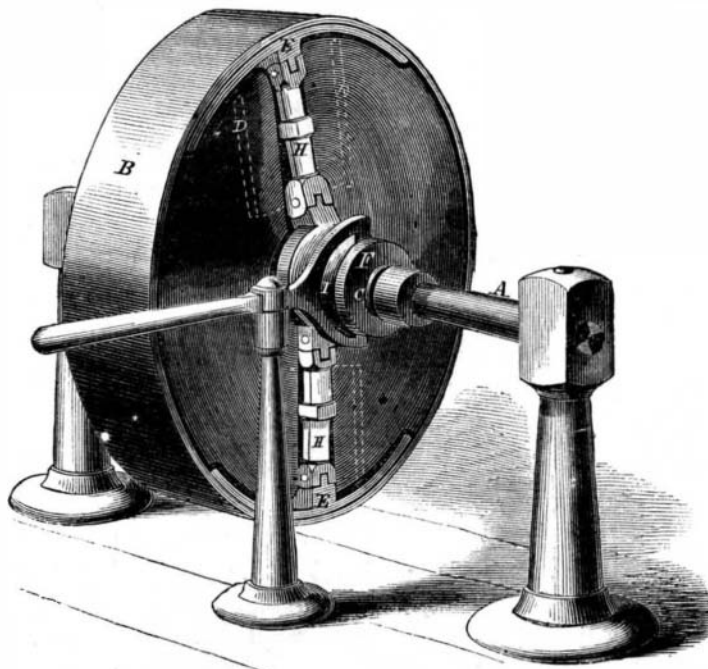
like to have them write to me and let me know the nature of their processes, and how much the right would cost for a tannery using \$3,000 capital.

WM. W. SITTLE.

Batesville, Ark., July 24, 1860.

## WRIGHT'S FRICTION CLUTCH.

The two sections of the paddle-wheel shaft of the Great Eastern are coupled together by a friction clutch,



WRIGHT'S IMPROVED FRICTION CLUTCH.

and this device is coming into very extensive use in many mechanical operations. It is especially advantageous in places where it is desirable to permit a slip in case of excessive strain upon the parts, and it relieves the machinery, in starting, from the sudden shock caused by throwing cog wheels into gear while they are in motion.

The annexed engraving represents a very compact and simple clutch which was invented and patented by Wendell Wright, an ingenious and well-known mechanic

the disk; the friction is thereby withdrawn and the pulley instantly becomes a loose pulley. This pulley is very easy to operate and is entirely free from noise.

These clutches are manufactured by the Providence Friction Clutch Company, of whom further information in relation to them may be had by addressing them at Providence, R. I.

**ENGLISH INDUSTRIAL REFORMS.**—The workingmen of England are still agitating for what is called the “nine hours” work law. Lord Robert Montagu, M. P., presided at a recent meeting of the body, in London, when he said:—“I have been told—and I believe truly—that the cause of the failure of so many mechanics’ institutions is to be found in the excessive labor of the working-class, who return to their homes so exhausted that they can take no pleasure in intellectual pursuits. I have also been told—and I believe truly—that the same cause helps to fill the public houses. I believe with Mr. J. S. Mill, that the invention of machinery was intended to diminish human labor, but that in its result machinery had supplanted and not helped humanity. I believe that it is essential to the existence of every nation that its population should not be ignorant and morally corrupt. Italy, Spain, Venice and Genoa, have fallen from this cause; and England could never make head against its foreign enemies, if ignorance and moral degradation were to spread amongst the people. They therefore require more leisure time.”

**AMERICAN** cotton manufacturers have done a most profitable business during the past year; and their prospects for the future are also very encouraging. The anticipation of good cotton crops from all parts of the world is affecting the manufacturers of England in a surprising manner. In Lancashire, about 40,000 factory operatives are wanted, and in the small manufacturing district of Bury, no less than 39 new cotton factories are now being erected.