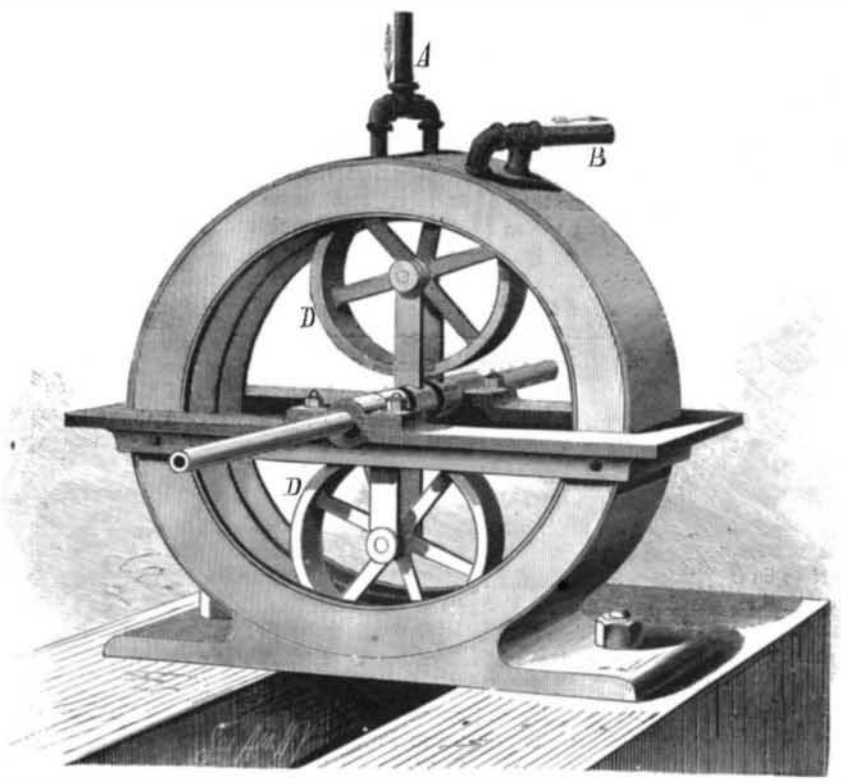
A NOVEL MOTOR.

The engraving shows a means of imparting motion to vehicles and machinery by the employment of soft tubing beneath a flexible bearing surface for traction wheels. The tubing and flexible bearing, under the influence of steam, water, air, or other expansible or compressible fluid forced into it, will form a wedge-shaped or inclined wall or abutment in the rear of the tangential bearing of the wheel, and propel it with greater or less speed according to the pressure of the propelling medium.

Fig. 1 shows the application of the principle to a rotary steam or air engine. Fig. 2 shows the rotary engine in a horizontal position adapted to running a millstone. Fig. 3 shows the device applied to the propulsion of wagons or cars, and Figs. 4, 5, and 6 show the application of the motor to elevated railroads.

The annular casing of the rotary engine is divided into two compartments, C C, in each of which is placed a very strong flexible hose connected at one end with the branched supply pipe, A, and at the other end with the branched exhaust pipe, B. These pipes, although designated as supply and exhaust, may be employed for either, as the motor is capable of running equally well in either direction. The hose in the compartments, C C, are provided with a flexible metallic bearing plate, which may be of steel or other suitable material, and upon these plates the wheels, D, press so as to bring the interior surfaces of the flexible hose into contact at that point. These wheels are supported by arms connected with the engine shaft, and when steam is admitted by either of the pipes, A B, and allowed to escape by the other, an inclined abutment is formed behind the wheels, which push them forward with greater or less force depending on the pressure of the steam, air, or water used in the motor.



CONGER'S MOTOR.

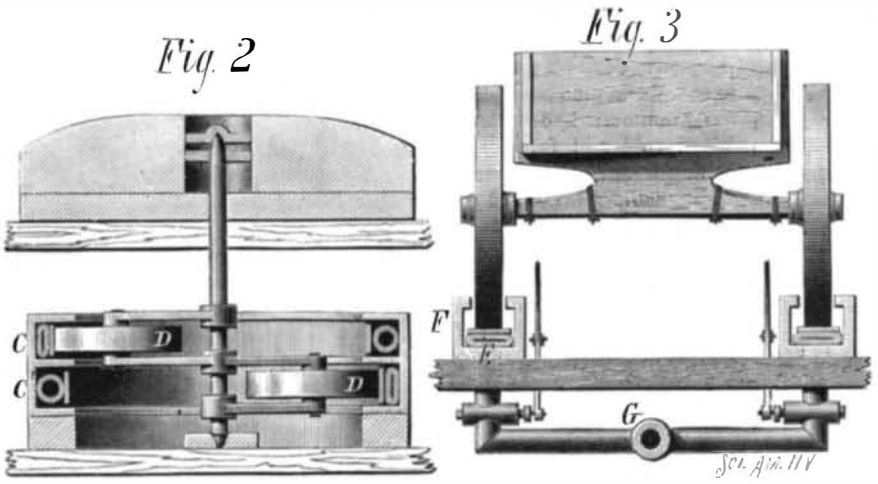
We are informed that these motors are capable of running at a very high velocity, and that they are efficient and may be applied to a large number of uses where the ordinary steam engine would be impracticable. Certainly nothing could be more simple, no piston, no valves, no stuffing boxes being required. The position in which this motor is placed is immaterial. It is shown in Fig. 2 placed in a horizontal position and adapted to the driving of millstones and vertical shafts. In this view the engine is shown in section, and the relative position of the flexible hose, C, its metallic covering, and the wheels, D, is clearly shown.

When the device is applied to railways the flexible tube or hose, E, is laid in a grooved track, F, and is protected by a straight ribbon of steel, upon which the wheels of the vehicle roll. This arrangement is adapted to light traffic, and for many purposes will answer admirably, but where the traffic is great the car is supported upon wheels running on an ordinary rail, while the driving wheel presses upon the hose with only enough force to bring the hose together, steam, water, or air tight, immediately beneath the driving wheel.

The hose is divided up into sections of fifty feet or more each, and each section is supplied by air from a main supply pipe, G, running below the track and connected with the air compressing station. At suitable intervals lateral pipes lead to valves at the sides of the track, with which the hose is directly connected. At this point there is a valve connected with the lever, H, and at the ends of the car there are levers which may be thrown out to engage the lever, H, and operate the valve so as to admit air to the section of hose upon which the car is just entering. The auxiliary lever at the side of the lever, H, is connected with the lever at the end of the filled section of hose, and as the driving wheel is leaving the filled section the lever carried by the car trips the auxiliary lever, moving the remote lever, H, and almost immediately touching the lever, H, of the section just entered.

It will be seen that by this arrangement collision is avoided, as the car on any particular section of the road has absolute control of that section. This system permits of running cars as frequently as may be desired, avoids all smoke and noise incident to steam propulsion, and is of necessity cheaper, both in respect to the road, propelling power, and rolling stock than any of the existing systems.

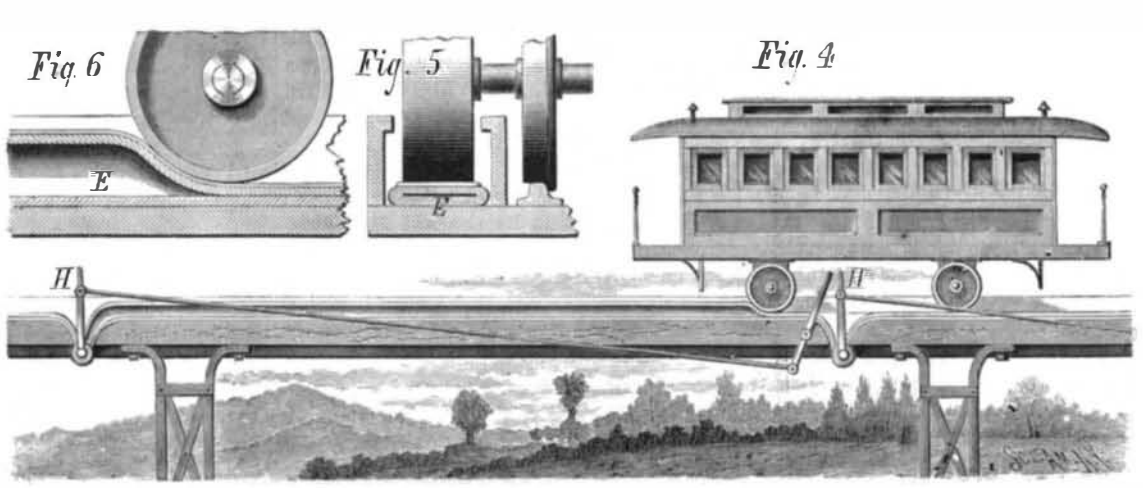
This invention was recently patented by Mr. M. M. Conger, of Wellsville, Mo. Further information may be obtained by addressing Messrs. Conger & Bro. as above.



MOTOR APPLIED TO MILLSTONE. MOTOR APPLIED TO RAILROAD.

The Sunflower.

This plant absorbs, both from the soil and atmosphere, an enormous amount of branched It is from the evaporation of the moisture charged with the gases emanating from the fermentative decomposition of such materials as street sweepings and garbage that diseases due to air charged with such vapor are inhaled and produced. An average sized sunflower plant will give off twenty ounces of water in twenty-four hours, all of which it must derive from the soil and the air. It is nothing strange, therefore, that it has been planted with great success in very many cases to counteract such malarious effects. It also shades the ground, and thus prevents very rapid evaporation of such injurious vapors Apart from this the produce of the crop is very valuable if properly managed. The average yield of seeds is about fifty bushels to the acre, yielding one gallon of oil to the bushel. The oil is good for table use, burning in lamps, and for the manufacture of soaps. The yield of marc or refuse after the oil has been expressed is about 1,500 pounds from an acre, and is an excellent food as oil cake for cattle, or as a manure. The stalks, when burned for alkali, will give 10 per cent of potassa, a very high average; and it has been lately stated that they will give a large amount of fiber useful for textile purposes or for paper making. The seeds are also an excellent food for poultry, who are very fond of them.



CONGER'S MOTOR APPLIED TO ELEVATED RAILROAD.

RECENT INVENTIONS.

Mr. Charles A. Simpson, of Saxonville, Mass., has patented a picture-cord attachment. The cord has a piral spring attached to one end and a flat hook attached to the other end, this spiral being screwed on the picture cord near the lower end, and a hook passed through an eye near the bottom of the rear of the same, and then passed up and hooked on to the cord lower or higher, according to the desired inclination of the frame.

Mr. Jacob C. Landes, of Souderton, Pa., has patented a shutter worker, which consists in a novel combination of a U shaped double cam fixed on the outer end of the crank rod passing through the side of the window frame, with a rod hinged on the outside of the window frame at right angles to the crank rod, and embraced by the cam, and extending horizontally along the face of the blind or shutter, so that the open blind or shutter may be unlocked, closed, and locked, or the closed blind or shutter be unlocked, opened, and locked.

Mr. Charles Chevalier, of Brooklyn, N. Y., has patented an engraving or chasing machine, designed for engraving or chasing on metals, stones, etc. The invention consists of a revolving engraving or chasing tool operated by a cam-actuated trip hammer, and of novel devices for guiding and adjusting the tool.

Mr. Shubael Cottle, of New York city, has patented a die for making bracelets, by the use of which he is able to make band bracelets so much cheaper than has heretofore been done that their cost, in proportion to the metal contained in them, is very much reduced. The bracelets made by this die are strong, durable, and finished in a superior manner.

Mr. Antoine Guipet, of Courbevoie, near Paris, France, has patented a window frame. It is of cast iron, and of such construction as will render it convenient in handling, transportation, etc. The architectural design presents a pleasing appearance. The sill is constructed to prevent water from penetrating from the outside.

Mr. Samuel H. Everett, of Macedon, N. Y., has patented an improvement upon a fertilizer-distributer for which letters patent No. 222,478, dated December 9, 1879, were granted to him. The present improvement enables the mechanism for discharging the fertilizer to operate more perfectly.

Messrs. George H. Hastings and Robert H. Crean, of Toronto, Ontario, Canada, have patented an improvement in the manufacture of hats, caps, and bonnets, which relates more particularly to head gear manufactured from textile materials. The invention consists in cutting the shoddy or other material into strips, which are then sewed together in squares of any desired size. The squares are then stiffened with glue or shellac, or any other suitable material, and pressed out in dies into any shape that may be required. The strips may also be sewed to any desired shape (instead of being sewed in blank) prior to being stiffened to that shape, and afterward pressed either by hand or by machinery. The material may be cut and sewed in parallel lines or diagonally in combination or in any shape that taste may suggest, and it may also be sewed in such a way as to produce the appearance of being corded

The Wyoming Valley Salt Bed.

A correspondent of the *Tribune*, writing from Wyoming, N. Y., gives the following information concerning the rich deposit of salt which has been opened there. About three years ago a company boring for petroleum struck, at the depth of 1,250 feet, a bed of pure rock salt 70 feet in vertical thickness. Its lateral extent is not known; all that has been observed of the deposition of salt, as well as the working of salt mines in Europe, leads to the conclusion that causes which deposited such a depth of salt must have operated over an extensive area. It seems evident that the Wyoming salt mine and the salt springs of Salina, Syracuse, Western Canada, Michigan, Wisconsin, and Iowa belong to the same geological formation, namely, that known as the