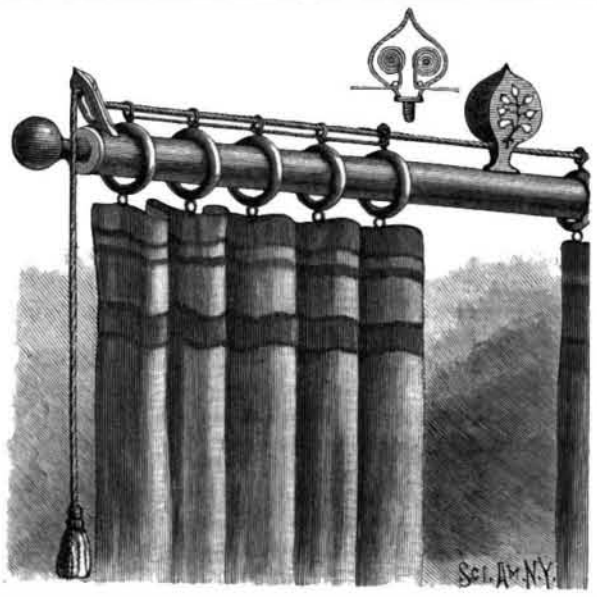
AN IMPROVED CURTAIN POLE FIXTURE.

A simple and convenient means of sliding a curtain upon the pole from which it is suspended, in such a way that the curtain will not be worn or torn, is shown herewith, and forms the subject of a patent issued to Mr. Charles H. Morgan, of West Chester, Pa. A case carrying spring rollers is attached centrally to the curtain pole, and a cord connected therewith passes over

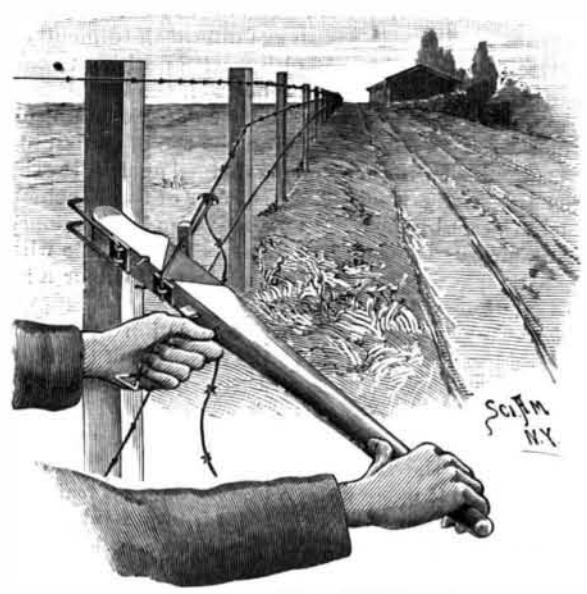


MORGAN'S CURTAIN POLE FIXTURE.

a pulley and out through the stem of the case, the cord being attached to the first curtain ring, and passing thence through a retaining piece at the end of the pole and falling at the side of the curtain, where it may be easily grasped by the hand. The curtain rings are fastened together by a separate cord, so that they will be spaced regularly upon the pole, and will all be moved by the cord connected with the spring rollers. The retaining piece at the end of the pole has a spring-held pivoted pawl adapted to hold the operating cord in any position in which it may be left at rest, with the curtains wholly or partly opened, while allowing them to be fully moved in either direction, at the will of the operator.

AN IMPROVED WIRE STRETCHER.

The illustration shows a light and conveniently manipulated device for stretching fence wires, which has been patented by Mr. John W. King, of Buena Vista, Tenn. Near the outer end of a hand lever are triangular recesses, in which is pivoted a yoke, the members of which are connected by a bar to which an outwardly extending twin hook is secured. In the rounded end of the lever are one or more teeth or pins, and a U-bar is pivoted near its end having hook-like teeth extending beyond the end of the lever, this bar being normally held folded back upon the lever. A small cutter projects from the back of the lever, and a hand bar is also hinged thereto. When a barbed wire is to be stretched it is passed through only one of the hooks, but a tape wire is to be passed through both hooks to give sufficient gripping surface. The wire being brought into engagement with the hooks, the teeth on the ends of the lever are placed in contact with the side of the post and the lever is swung around until the wire is brought up against the post, when the teeth of the U-bar, being made to engage the opposite face of the post, will hold



KING'S WIRE STRETCHER.

the lever parallel with the line of stretched wire, which may be nailed or clamped to the post in the usual way.

THE Penberthy Automatic Injector Co., of Detroit, Mich., exhibited their injector at the Detroit exposition of 1889, and were awarded therefor the only medal given in this line.

Effect of Whistling on Seals.

While reading of "Instances of the Effects of Musical Sounds on Animals," by Mr. Stearns, in which I have been much interested, it recalled to my mind apparently similar effects produced upon seals, which I often noticed during a prolonged stay in Hudson's Strait. Here the Eskimo might often be seen lying at full length at the edge of an ice floe, and, although no seals could be seen, they persistently whistled in a low note similar to that often used in calling tame pigeons, or, if words can express my meaning, like a plaintive phe-ew, few-few, the first note being prolonged at least three seconds. If there were any seals within hearing distance, they were invariably attracted to the spot, and it was amusing to see them lifting themselves as high as possible out of the water, and slowly shaking their heads, as though highly delighted with the music.

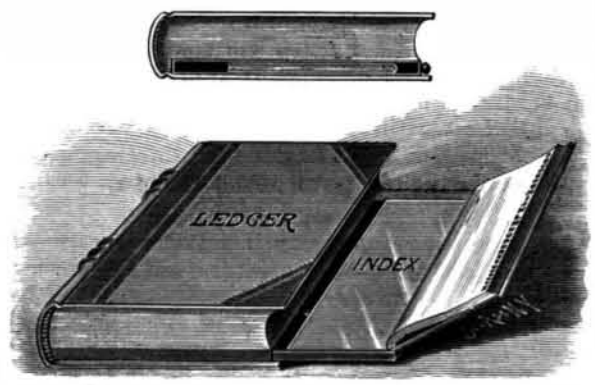
Here they would remain for some time, until one, perhaps more venturesome than the rest, would come within striking distance of the Eskimo, who, starting to his feet with gun or harpoon, would often change the seal's tune of joy to one of sorrow, the others making off as fast as possible.

The whistling had to be continuous, and was more effective if performed by another Eskimo a short distance back from the one lying motionless at the edge of the ice.

I may add that the experiment was often tried by myself with the same result.—*F. F. Payne, in American Naturalist.*

AN IMPROVED LEDGER INDEX.

A device designed especially for the convenience of bookkeepers is illustrated herewith, and has been patented by Mr. George A. Pratt, of Brownsville, Cal. To the inside of the cover of the ledger or other large book having an index is secured a suitable casing with an opening in which operates a drawer, to be held in place by a knob and catch or lock. Within this drawer is placed a separate index book, so that the bookkeeper, on pulling out the drawer, will have the index continually before him while posting, and be saved the neces-



PRATT'S BOOK INDEX AND CASING.

sity of having constantly to turn to the front of the book to find the folio for each account. The drawer is so attached to the ledger by means of catches on each side that there is no liability of their becoming separated.

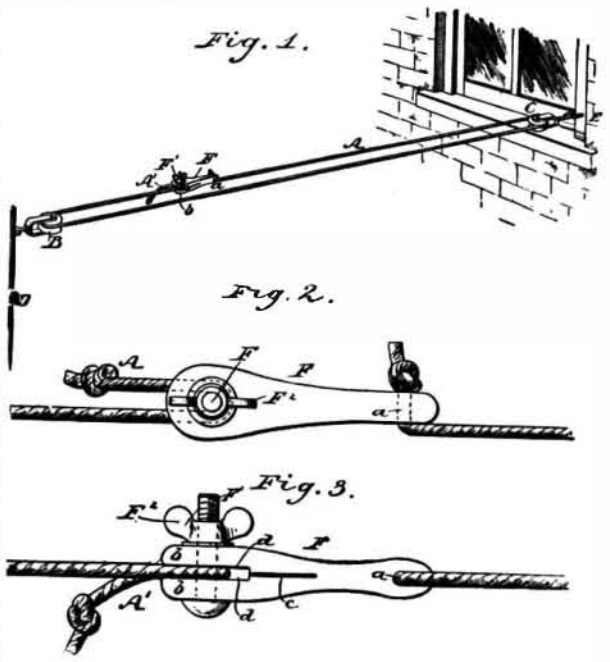
Effect of Small Bore Bullets on the Body.

The adoption of small bore rifles by most European countries—Switzerland now employing 7·5 and 6 millimeters (25 mm. being very nearly an inch), France 8, Belgium 7·6, instead of the hitherto universally used 11 mm.—leads to the consideration of what the effect on the human body will be of the increased penetration of these bullets, which can pass through iron plates of 12 mm. (nearly half an inch), and deal planks of 1·1 meter (about a yard) in thickness—a penetration five or six times as great as that of the projectiles hitherto employed in the German army. Professor Paul Bruns, the well known surgeon of Tubingen, has published a work which attempts to give an experimentally scientific answer to this important question. His experiments were made with the Belgian Mauser rifle, and the conclusions he has come to must be considered in all respects satisfactory from a humane point of view. He asserts that the hydraulic pressure in the wound is much diminished, partly on account of the smaller diameter of the bullet and partly on account of the spring action of the thin steel coating which surrounds the soft lead core of the new projectile, so that the extensive tearing of the soft tissues of the body, such as the old lead bullets used to cause—and which often gave rise to the erroneous idea that explosive bullets were employed—will not occur.

The new projectile, which, at 100 meters, passes through four or five limbs and smashes up three thigh bones, placed one behind the other, makes a smooth cylindrical opening, of less diameter than itself, through flesh. The wound made where the bullet enters is generally of less diameter than itself. The exit is a slit or a star-shaped opening, with torn edges, about 6 to 8 mm. wide. At longer ranges, 400 to 1,500 yards, the bones are not shattered, but bored through in a clean hole or channel. Hence, according to Dr. Bruns, the chances of healing bullet wounds will, notwithstanding the much greater efficiency of the new rifle, be much more favorable than in the case of the larger bores. So it would appear that in all cases progress in the art of war leads to the diminution of human suffering!—*Ueber Land und Meer.*

AN IMPROVED CLOTHES LINE ADJUSTER.

The device shown is designed to be applied to traveling clothes lines, for readily drawing the line taut, and to automatically relieve the strain incident to shrinkage after wet weather. It has been patented by Mr. Henry F. Metzler, of No. 603 Carroll Street, Brooklyn, N. Y. Fig. 1 shows the device in



METZLER'S CLOTHES LINE ADJUSTER.

use, Fig. 2 being a plan view thereof, and Fig. 3 a side view. One end of the rope is passed through the aperture, *a*, in the holder, and knotted, the other end being passed through the jaws, *b b*, and around the bolt, F', as around a pulley. The body of the holder may be of wood or metal, but is preferably of wood, and is slotted, as at *c*, to form the jaws, and recessed at *d d*, to allow space for the rope to pass. A screw-threaded common bolt may be passed through the jaws, with a thumb nut for tightening the jaws upon the rope, the grip upon the rope being made firm enough to hold it ordinarily taut, but not so close as to prevent a slight drawing of the line through the jaws to allow for shrinkage without injurious strain.

A WATER SHIELD FOR WINDOW BRUSHES.

The device shown in the illustration is adapted for convenient and expeditious attachment to the handle of any brush or window-cleaning implement, to prevent the water from passing down the handle to the hands of the operator. It has been patented by Mr. Isaac Stiner, of No. 248 East Seventy-eighth Street, New York City. The device consists of an elastic cup, preferably formed of rubber, and having an upwardly extending central conical portion, through which is an opening for the passage of the handle, there being also

STINER'S WATER SHIELD FOR WINDOW BRUSHES.

an annular flange integral with the outer side face of the cup, and an aperture or opening on one side forming a spout for the delivery of water from the cup.

THE military commission of the Austrian army have established a law that the offense of intoxication should be punished the first time by a public reprimand. The second offense by several days' imprisonment in the guard house. The third offense is evidence that the victim is suffering from a chronic disease, and he is placed under constant surveillance. His pay is taken out of his hands, and every means used to prevent him from getting money to secure spirits.