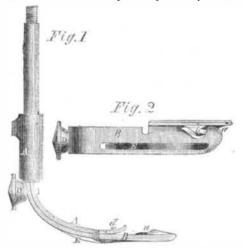
# CLEMMON'S HEMMING ATTACHMENT TO SEWING-MACHINES.

This invention consists in the attachment of a secondary spring in the groove in the hemming attachment into which the feeder works, for the purpose of holding the cloth down to the feeder without reference to the thickness of hem.

In our illustrations of this excellent little attachment to every sewing machine, Fig. 1 is a side elevation and Fig. 2 is an underside view. A is the ordinary pressure-pad of a Wheeler & Wilson sewing-machine, the general construction of which and mode of attachment to the machine is the same as that generally employed. B is the hemming attachment, or rather the main-piece or stock of it, to which its smaller parts are attached. This is made with a groove for them and a spring-guide and point, d and b, to give the edge of the cloth a spiral direction to fold the hem. This attachment is so constructed that it may be readily attached to the ordinary pressure-pad of a sewing-machine without the necessity of removing any of the parts. The general idea of the details of the construction adopted may be gathered from a glance at Fig. 1. The attachment is so formed as to fit the under side of the pressure-pad nearly the whole



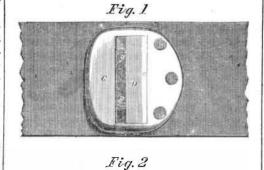
length of the under face of the pad. A slot is led in the end of the said pressure-pad to receive the pin, d, which fits in it to secure the hemming attachment from turning. The other end of the attachment is secured and the whole of it kept up in place by the thumb-screw, D, which is tapped into the shank of the pressure-pad just above where it rises in an elbow from the cloth to unite with the parts above it. This attachment is very plain and simple, and further description is unnecessary. It enables the operator to remove or replace the hemming attachment in a moment. To prevent the cloth from getting away from the feeder, while at the same time the points of the said feeder are secured from the heavy pressure of the pad which holds the cloth upon the bed and to secure certainty of action without reference to the thickness of the hem, a spring, E, is attached to the hemmer in the groove above the feeder, as shown in the drawings. A piece of heavy lever watch spring is quite sufficient for the purpose and exerts a slight pressure which holds the cloth down to the feed, while at the same time it acts independently to a certain extent of the action of the pressure-pad.

The inventor is Wm. Clemmons, of Nicholasville, Ky., who will be happy to furnish any further information. The patent is dated March 1, 1859.

### GREEN'S SECURE BELT COUPLING.

A small contrivance is often of the greatest value, and exercises an influence entirely disproportionate with its seeming unimportance. Such an one is the subject of our illustration, which looks a simple and insignificant invention, but from the perusal of letters from large manufacturers using them, it would seem to be an invention of great importance. It is a belt clasp for joining together the ends of machine belting, and as all who use it say, is far superior to lacing. Fig. 1 shows a top view of two ends of a belt joined with this clasp, and Fig. 2 is a section through the joint. A B, represent the ends of the belt, and C is a metal stock or plate of oblong form, and equal or nearly equal to the belt in width. This stock is firmly riveted to one end, B, of the belt, and it has a slot or opening, a, made longitudinally through it. One edge, c, of the slot is corru-

gated, and the opposite edge is grooved to form a concave, d, to receive one edge, e, of the tongue, D, which is grooved and corrugated, f, to correspond with or fit into the edges of the slot. The tengue is not so large as the slot, room being allowed to pass the belt between



the tongue and the edge of the slot; and the tongue is provided with two spurs, g, which enter into the belt and hold it fast. When the end of A is passed through the slot in C, between its edge, c, and the edge, f, of the tongue, D, the tension of the belt when in operation will cause the edges, f, of the tongue to press the end, A, of the belt firmly against the edge, c, of the slot, for the edge, e, of the tongue is lower than the corrugated edges, f, and the spurs, g, which are forced into A, prevent the tongue from moving outward and releasing the end of the belt, when the belt is suddenly cast off from the driving pulley, a contingency likely to occur under the circumstances if not provided against, owing to the sudden cessation of the tension of the belt and a slight degree of elasticity which it possesses. The end, A, can be detached by drawing it outward through the slot with pincers or the hand, until the spurs, q, pass out of the leather and allow the tongue to be removed.

The inventor and general agent is Samuel Green, of Mottville, N. Y., and the manufacturer is E. B. Hoyt, of the same place, either of whom may be addressed for further information. The patent is dated March 23, 1858.

### MASURY'S IMPROVED PAINT CAN.

One of the great objections to the many cans for conveying small quantities of paint and such like substances about, or holding them hermetically scaled, is that they are remarkably difficult to open, as we expect nearly all our readers have discovered for themselves. The invention which we have illustrated is a very simple method of overcoming this difficulty without adding materially to the expense of the can.



The can, A, is made of tin or other metal, and the top or cover, C, is also of tin or the same metal as the can, but is somewhat smaller than the opening so as to allow of a margin of soft, thin sheet metal, such as brass. B, to which the cover can be soldered and that can be soldered by the can. This margin of soft metal can be cut with a penknife and the cover easily removed. The operation of cutting is like that of opening a sardine box, and is shown in our engraving.

The inventor is J. W. Masury, of Brooklyn, L. I., and the patent is dated July 12, 1859. Any further information can be obtained by addressing Masury & Whiton, No. 111 Fulton-street, New York.

## THE WORKS OF NATURE.

A correspondent in a weatern exchange becomes thus truly eloquent in his letter:—"The works of nature comprise one of the most brilliant subjects that can be called to mind. Gazing on the works of the Creator you are

engrossed with a feeling of uncontrollable delight; there is something so calm, so sublime painted upon them.

Go into the dense forest, and behold the giant oak reared with the growth of many years, towering toward the sky, and stretching forth its huge limbs as if to protect its neighboring trees.

Ascend the Alleghany mountains and we can behold a broad range of rugged country as far as the eye can reach, as yet not much cultivated. Look in another direction and see mighty rivers, rolling calmly on their course, or their surfaces rocked by the blast of the tempest.

Walk forth some moonlight night, when the scars are shining like rubies set in the firmament of heaven, and gaze on their brilliant aspect; so silent and tranquil is the scene before you that you are enchanted with its beauty.

The Mammoth Cave in Kentucky is another of nature's extraordinary works—the most remarkable one in the world. It is said to extend ten miles under ground, at the extreme end there is a dark pit, said to be some 200 feet in depth, which has not been much explored.

In many instances dark caves, pits, and other remarkable places of nature's great works have been discovered, but till this day not explored. Is it not singular, that nature should construct so many things that man cannot comprehend?

If all the unknown regions in the world could be explored and brought to light, would there not be many things for the pen of scientific and literary men to describe, and many mysteries to unfold?

The traveler on his traveling excursion through country is continually coming in contact with some a scenery, some new attraction for his fancy to work upon.

All things made by the hand of the Creator are beautiful, even the smallest thing has some hidden meaning which when fully developed is very interesting.

In the study of the 'works of nature,' there is more beauty, more serenity, than in any other study. There is always something to enlighten the mind, and give it food to nourish upon."

# MECHANICS, INVENTORS, MILLWRIGHTS, AND MANUFACTURERS.

The SCIENTIFIC AMERICAN is a paper peculiarly adapted to all persons engaged in these pursuits, while to the Farmer, Housekeeper, and Man-of-Science, it will be found of equal interest and use.

The SCIENTIFIC AMERICAN has been published Fourtress and use.

YEARS, and has the largest circulation of any journal of its class in the world. It is indispensable to the Inventor and Patentee; each number containing a complete official list of the claims of all the patents issued each week at the United States Patent Office, besides elaborate notices of the most important inventions, many of which are accompanied with engravings executed in the highest degree of perfection.

To the Mechanic and Manufacturer the SCIENTIFIC AMERI-CAN is important, as every number treats of matters pertaining to their business, and as often as may be deemed necessary a column or two on the metal and lumber markets will be given thus comprising, in a useful, practical, scientific paper, a Price Current which can be relied upon.

The SCIENTIFIC AMERICAN is published weekly, in a form suitable for binding, each number containing sixteen pages of letterpress, with numerous illustrations, making a yearly volume of 832 pages of useful matter not contained in any other paper.

### Terms.

Two volumes will be issued each year; but there will be no change in the terms of subscription, as the two yearly volumes together will be Two Dollars a Year, or One Dollar for Six Months,

# Club Rates.

Five Copies, for Six Months	\$4
Ten Copies, for Six Months	
Ten Copies, for Twelve Months	
Fifteen Copies, for Twelve Months	
Twenty Copies, for Twelve Months	

Southern, Western, and Canadian money or Post-office stamps taken at par for subscriptions. Canadian subscribers will please to remit twenty-six cents extra on each year's subscription to pre-pay postage.

For all clubs of Twenty and over, the yearly subscription is only \$1 40. Names can be sent in at different times and from different Post-offices. Specimen copies will be sent gratis to any part of the

When persons order the SCIENTIFIC AMERICAN they should be careful to give the name of the Post-office, County, and State to which they wish the paper sent. And when they change their residence, and wish their paper changed accordingly, they should state the name of the Post-office where they have been receiving it, and that where they wish it sent in future.

MUNN & CO., Publishers, No. 37 Park-row, New York.