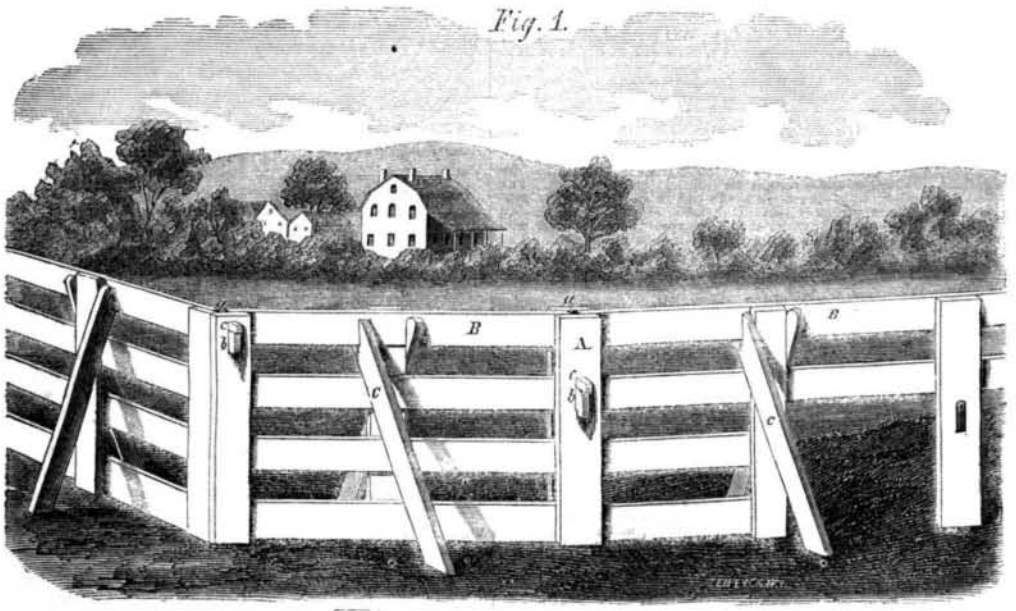
Improved Farm Fence

The accompanying engraving is a representation of an exceedingly neat and tasty fence for inclosing land of whatsoever kind, and one well adapted to new countries and rolling ground. The settler on the distant prairies or the emigrant breaking ground for the first time in the far West, remote from cities, finds here an invention which, by the exercise of a moderate degree of skill, enables him to mark the confines of his possessions with a fence which is cheaply constructed, easily removed from place to place, if desirable, and not liable to disarrangement It is elastic in its nature and readily adapts itself to inequalities of the ground, being without posts or post-holes; the diagonal braces supplying their places; and, lastly, it has not, necessarily, a nail employed in its construction.

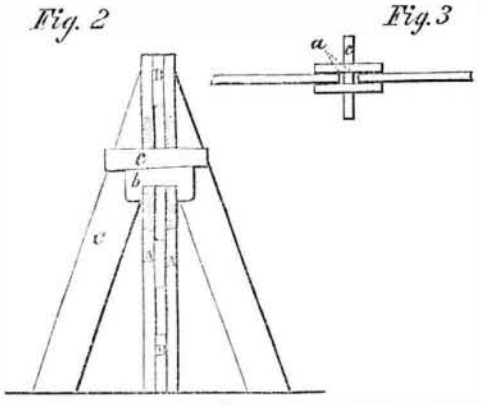
Fig. 1.



GIBSON'S PATENT FARM FENCE.

The arrangement of the parts is very simple, the upright, A, the longitudinal rails, B, the diagonal braces, C, and the gibs and keys, *b* and *c*, constituting the whole of one section. The invention consists in so arranging the upright, A, on the longitudinal rails, B, that the former may lap over the ends of the rails laterally, to which they are secured by the aid of the gib, *b*, and the key, *c*; the ends of the rails, however, are not permitted to butt together, but have a space, *a*, left between them of about two inches and a-half on each side, by which means the flexibility—one of the chief peculiarities of the invention—is secured.

Fig. 2 Fig. 3



The braces or stays, C, are attached to each side of the fence, and are provided with slots in their upper ends, which fit into recesses cut for them in the top rail or longitudinal bar; on the edges of the same braces notches are also cut, which fit into the same device cut in the upper side of the second rail from the top; thus the braces are retained in position without nails, while, at the same time, they bind the whole fabric rigidly together. The jaws of the gib, *b*, fit over the upright, A, as in Fig. 2, and they, as well as the keys, are allowed a little side play in the mortise, so that they may not cramp the fence while following the nature of the ground. At the corners of the fence the arrangement is the same in relation to the rails, with the exception that the gib, *b*, instead of passing through both uprights, is firmly secured to the upright, A, and passes through a mortise in A*, retained by a suitable key; the space is also allowed between the ends as in the other parts. When it is desired to make an angular or worm fence, the mortises pass through obliquely, by which method the required freedom is given to the various sections.

The patent for this invention was obtained through the Scientific American Patent Agency, and is dated May 13, 1862. By addressing William Gibson, box 363, Fort Wayne, Ind., further information can be procured.

DO NOT DESPISE THE SHOP.

The importance of mechanical training, and of habits of regularity and method, cannot be overestimated in their various bearings upon the relations of life, and we would say to those young men who are at this moment struggling through details which appear to be hard, useless and full of weariness, to hold on! their utility may not be apparent at present, but the day is sure to come when they will reap the benefit of such discipline and routine. Hold on! don't give up; in our country no social prejudices prevail which prevent the humble dyer from becoming the learned and skillful chemist; no barriers exist which deprive those whom the chances of life have made rude and unlettered, from becoming shining lights in the world of science. Most great inventors have sprung from the ranks of the brave daily workers, and the field is still a wide one, expanding every day; therefore we say "hold on" to the training of the shop, improve your spare hours in mental culture, and reward is certain.

What to Send to Soldiers.

Those who are in doubt what they should send to their friends in the army will do well to read over the following catalogue of items made up for general circulation by a Western journal:—

Ambrotypes in five pound cases; "Life of Josephus," in ten volumes; patent Dutch ovens, full size; feather beds and pillows; ripe watermelons; firkius of fresh butter; sample from last litter of pups; baby wagons for use of infantry; sausage stuffers; castor oil in bladders; frosted cakes in bandboxes; catnip tea well stirred; fluid lamps without wicks; hair brushes; fiddle strings in the original package; vases for flowers; ice-cream freezers; rattlebelly pop in quart bottles; pillow cases stuffed with head cheese; flesh brushes with directions for use; fresh eggs; sand to scour knives with; pickles in jars; honey in little baskets; photographs in frames; bootjacks; French mode of raising trout; tea in caddies; hot water for soaking feet; nutmeg graters with handles; maps of the country on rollers; fanning mills for fevers; tomato catsup in casks; boot blacking in pint bottles; parlor skates; Suffolk pigs for pets; empty dry goods boxes; lead pipe for bullets; prepared kindling wood in bundles; flower seeds labeled; old horse collars; mush and milk in pans; mouse traps; cinnamon essence for the hair; clothes lines and pins; chicken gravy in bowls.

All such articles the soldiers can as well carry as not, and if captured the enemy will wonder at the inexhaustible resources of the North.

Some curious experiments in gunnery have just taken place in Verona. Fort Wratislaw, belonging to Austria, was cannonaded first at a distance of six hundred paces, and then of one thousand, the guns being charged with gun cotton. The impulsive force of this substance was ascertained to be two and one quarter times that of gunpowder.

A fire-proof building is to be erected at one of the docks in Liverpool, for the exclusive purpose of storing the petroleum that arrives from America. It is to be furnished with iron tanks capable of holding 320,500 gallons, and with room above the tanks for storing 140,000 in casks.

PROSPECTUS

OF THE

SCIENTIFIC AMERICAN.

THE BEST MECHANICAL PAPER IN THE WORLD

EIGHTEENTH YEAR!

VOLUME VII.—NEW SERIES.

A new volume of this widely circulated paper commenced on the 2d of July. Every number contains sixteen pages of useful information, and from five to ten original engravings of new inventions and discoveries, all of which are prepared expressly for its columns.

The SCIENTIFIC AMERICAN is devoted to the interests of Popular Science, the Mechanic Arts, Manufactures, Inventions, Agriculture, Commerce, and the Industrial pursuits generally, and is valuable and instructive not only in the Workshop and Manufactory, but also in the Household, the Library and the Reading Room.

The SCIENTIFIC AMERICAN has the reputation, at home and abroad, of being the best weekly journal devoted to mechanical and industrial pursuits now published, and the proprietors are determined to keep up the reputation they have earned during the seventeen years they have been connected with its publication.

To the Inventor!

The SCIENTIFIC AMERICAN is indispensable to every inventor, as it not only contains illustrated descriptions of nearly all the best inventions as they come, but each number contains an Official List of the Claims of all the Patents issued from the United States Patent Office during the week previous; thus giving a correct history of the progress of inventions in this country. We are also receiving, every week the best scientific journals of Great Britain, France and Germany; thus placing in our possession all that is transpiring in mechanical science and art in these old countries. We shall continue to transfer to our columns copious extracts from these journals of whatever we may deem of interest to our readers.

To the Mechanic and Manufacturer!

No person engaged in any of the mechanical pursuits should think of doing without the Scientific American. It costs but four cents per week; every number contains from six to ten engravings of new machines and inventions which cannot be found in any other publication. It is an established rule of the publishers to insert none but original engravings, and those of the first-class in the art, drawn and engraved by experienced artists, under their own supervision, expressly for this paper.

Chemists, Architects, Millwrights and Farmers!

The SCIENTIFIC AMERICAN will be found a most useful journal to them. All the new discoveries in the science of chemistry are given in its columns, and the interests of the architect and carpenter are not overlooked; all the new inventions and discoveries appertaining to these pursuits being published from week to week. Useful and practical information pertaining to the interests of millwrights and millowners will be found published in the Scientific American, which information they cannot possibly obtain from any other source. Subjects in which planters and farmers are interested will be found discussed in the Scientific American; most of the improvements in agricultural implements being illustrated in its columns.

TERMS.

To mail subscribers:—Two Dollars a Year, or One Dollar for six months. One Dollar pays for one complete volume of 416 pages; two volumes comprise one year. The volumes commence on the first six January and July.

CLUB RATES.

Five Copies, for Six Months	$4
Ten Copies, for Six Months	8
Ten Copies, for Twelve Months	15
Fifteen Copies, for Twelve Months	22
Twenty Copies, for Twelve Months	28

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 country.

Western and Canadian money, or Post-office stamps, taken at par for subscriptions. Canadian subscribers will please to remit 25 cent extra on each year's subscription to pre-pay postage.

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

FROM THE STEAM PRESS OF JOHN A GRAY

© 1862 SCIENTIFIC AMERICAN, INC.