

### IDEAL WOVEN WIRE FENCE

When you build fence, you ought to be thinking of permanent improvements. Tinkering does not pay. Fences made of light wire, and wires that break rather than give when it gets cold; fences that an unruly animal could break through; fences not properly stayed—these are not paying kind. It takes only a glance at the Ideal fence to see that it is the right kind. It is made of No. 6 hard steel wire from top to bottom, and is heavier and stronger than any fence on the market. Remember, it costs no more to dig your post holes, set your posts, stretch your fence and staple it when the heavy Ideal fence is used than for a light, flimsy article. And notice how the Ideal fence is locked at every crossing. It is heavily galvanized to keep off rust. It will adapt itself to the greatest extremes of heat and cold, and always present a handsome, well stretched appearance. You do not buy fence for exactly the same reasons. It pays to study the matter over thoroughly before you buy any kind of a fence. We have prepared a little book that will tell you all about Ideal fence. It gives fence pointers and details that we cannot give here. Write and let us send it to you. A postal will do; write to-day.

McGregor-Canwell Fence Co., Dept. B, Walkerville, Ontario.

### "Oshawa" Steel Shingles

WIND, WATER, STORM and FIRE PROOF



LOCKED ON ALL FOUR SIDES

Made from Painted or Galvanized Steel at prices varying from \$2.85 to \$5.10 per 100 square feet, covering measure. This is the most durable covering on the market, and is an ideal covering for Houses, Barns, Stores, Elevators, Churches, etc. Any handy man can lay the "Oshawa" Shingles. A hammer and snips are the only tools required. We are the largest and oldest company of the kind under the British flag, and have covered thousands of the best buildings through Canada, making them

**FIRE, WATER AND LIGHTNING PROOF.**

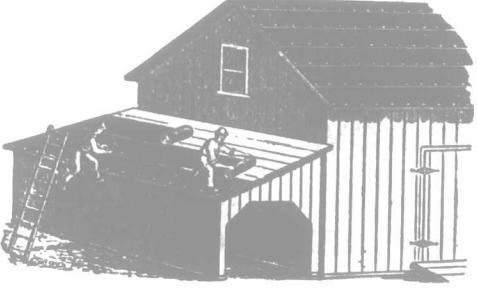
We also manufacture Corrugated Iron in long sheets. Conductor Pipe and Eavestrough, etc. Metal Sidings in imitation of brick or stone. Metal Ceilings in 2,000 designs. Write for Catalogue No. 14 R and free samples of "Oshawa" Shingles. Write to-day.

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76 Lombard St. 615 Pender St.

Write Your Nearest Office.

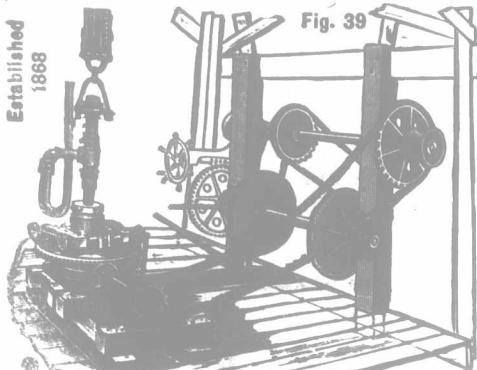
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For steep or flat roofs, water-proof, fireproof, easily laid, cheaper than other roofing. Send stamp for sample and mention this paper.

**Hamilton Mica Roofing Co.,** 101 Rebecca St. HAMILTON, CANADA



Established 1888

Fig. 39

### LIGHTNING WELL MACHINERY,

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**The American Well Works,**  
Aurora, Illinois, U. S. A.  
CHICAGO, ILL. DALLAS, TEX.

#### Why Incubator Chicks Die in the Shell.

There seems to be a wide and varied opinion as to why chicks die in the shell. Many claim, which is true in a sense, that the germ is weak, caused by too close inbreeding. It is true also that we find weak germs at times when the parent stock is not related.

Too close confinement, with little or no exercise, or improper feeding, will also cause chicks to die in the shell, the germ not being strong enough to withstand the various changes during incubation.

The writer is fully convinced after careful demonstrations, that while the above causes are partially true, the main cause is improper ventilation. The system of ventilation in incubators of to-day is such as to cause a draft, drying the eggs too fast, causing the membrane or lining beneath the shell of the egg to become tough, so much so that at hatching time the chick is unable to break through, many even dying in the shell after being pipped; whereas, if this membrane could be kept soft and brittle as when fresh-laid, the chick would easily have picked its way out.

By placing a hygrometer under a sitting hen, the humidity or moisture will register about 60 per cent., while in almost all makes of incubators less than half that amount will be shown. Herein lies the explanation of such poor hatches in high altitudes, the air passing too rapidly through the incubator, taking the moisture from the egg too fast, drying and toughening the membrane until the chick cannot break through.

To demonstrate that chicks die in the shell from lack of ventilation, I have made an incubator in which instead of using a two-inch pipe (the size used by manufacturers) to convey the heat from the heater into the incubator, I used one of four-inch diameter, which furnished me with a much greater volume of pure warm air. Also in addition to the larger pipe I constructed within the outer wall of the heater a reservoir, containing water for evaporation. Hygrometer tests made with the heater without the reservoir showed the degree of humidity to be only 18 degrees, while with the reservoir containing water the humidity registered normal, or about 60 degrees. I am positive that the eggs to retain their natural condition must have added moisture, and some must be taken in with the supply of heat, and not from moisture pans, which affect principally the eggs near them. With the above system the air is moistened to the normal condition of the hen, which by hygrometer test, is shown to be 60 degrees, and by being carried in with the source of the heat, every egg is affected the same.

The machine constructed was of 200-egg capacity, walls 14 inches deep between the top and bottom. I made several hatches with a percentage ranging from 90 to 94 per cent. out of fertile eggs, and the finest, strongest chicks I have ever seen, no cripples, and no weak ones, and why? For no other reason than that the ventilation was right from beginning to end of hatch. These experiments were made in all kinds of temperature, varying from 98 degrees to below freezing. This demonstrates the simple fact that to secure good hatches and to prevent chicks dying in the shell the incubator must be made with more ventilation, and that the eggs must be incubated with the proper amount of humidity.—O. P. Scott, in Farm Poultry.

Few cattle are being bought for feeders, so the Chicago market papers report. Competition has been keen for sheep to go on feed. Prices for cattle to be marketed next spring may be expected to be more satisfactory than latterly.

What She Meant—"Is yo' got enny haih fo' sale, boss?"  
"Any what, aunty?"  
"Haih, boss?"  
"Hair?"  
"Yassuh, haih lak' yo got on you' haih."  
"Oh, hair."  
"Yassuh, haih."  
"Why, no, aunty; this is a dry-goods store, not a hair store."  
"Dat's what Ah 'lowed, boss; but mis-sus tole me to cum yeah an' get free yahds mo' hair lak she done got yis-tiddy!"  
"Oh, you mean mohair!"  
"Yassuh, mo' haih."



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86-page treatise R. free. Agents wanted.

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