

Rural Economy.

THE GOVERNMENT EXPERIMENTAL GARDENS. It was my good fortune, a few days since, to visit these gardens, which are located on the canal west of the Capitol.

IRRIGATION.

That the artificial application of water is beneficial to nearly every species of vegetation, is quite evident. We have seen its effects too often to doubt the truth of this proposition.

Scientific.

IRON AND STEEL. (Concluded.) ANCIENT MODES OF MAKING STEEL. The ancient method of making steel, though rude, was remarkably effectual; and to this day, the Hindoo iron-smelter, who builds his clay furnace, lights within it his fire of wood, and charges it with iron ore.

HINTS ON PAINTING OLD WOOD WORK.

As soon as there have been one or two hard frosts to kill most of the flies, it will be an excellent time to paint wood work in the kitchen, or any other part of the house.

Where wood work is much spoiled, especially by hands not scrupulously clean, it is sometimes difficult to make even the best paint hold well.

In order to make paint stick and become about as firm as the wood itself, wash the surface thoroughly with moderately strong lye, using a short swab, then wipe it off with a cloth wrung out in fresh water.

Paint for such places should be made of the best white lead, mixed to the consistency of thin cream, with two parts of the best boiled linseed oil, and one part of good laquer, or "liquid drier."

Such paint will dry in one day, and become sufficiently hard to handle in a few days. A very small quantity of lamp-black will make a beautiful lead color.

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to the employment of some more durable material than ordinary wrought iron for rails, with the object of providing a more "permanent" way than any that had yet been adopted.

Certainly no better spot could have been fixed upon for determining the durability of the Bessemer material. On the 2d of May, 1862, two steel rails were laid down precisely opposite two new iron rails of the best quality, so that no engine or carriage could pass over the iron rails without also passing over the steel.

Dr. Percy raises an important point for discussion, with reference to a supposed deterioration in the quality of iron resulting from the effects of percussion, which applies equally to steel.

Where iron exhibits a crystalline appearance on breaking, Dr. Percy rightly points out that time plays a most important part in determining the character of the fracture. When the metal is broken with extreme rapidity, the fracture will be crystalline; when broken slowly, it will be of a fibrous appearance.

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periness of the roads rather than to the increased brittleness of our bones at that season. To put the matter to a practical test, however, Mr. Ramsbottom had a piece of rail taken up while covered with sharp frost, and placed under the large steam hammer at Crewe, when it stood the blows necessary to double both ends together, without showing the smallest indication of fracture.

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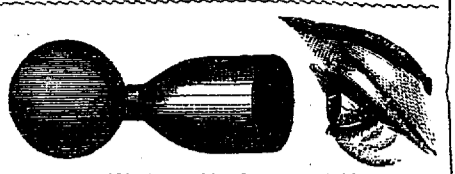
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