
It seems to me, therefore, that in the use of hydrocyanic acid gas the whole problem of household insects is practically solved. When these insects are few in numbers fight them by the old-fashioned methods; but if they have increased to the point of desperation, vacate the house over night and try the cyanide method. The greatest care should be observed in the use of the gas, for the reason that it is destructive to all warm-blooded animals, including human beings, as well as to insects. The house may be quickly ared, however, and the odor of the gas is readily detected. The house should not be occupied until the odor has been entirely dissipated. The odor is that of peach kernels.

AMERICAN WOOLEN CO.

The following statement of the business of the American Woolen Co. will be of interest: In 1901 their net sales amounted to £6,967,938, an increase of £1,033,296. Net profits amounted to £415.551, a loss of £152.258 for 1900, probab'y due to the poor condition of the trade in the first seven months of 1901. After paying £280,000 on the preferred stock, the company's final surplus amounted to £556,681. In addition to the annual report, the following important statement has been made: Earnings since organization, March 29th, 1899. to January 4th, 1902, £1.520.197; less preferred dividends paid and accrued, £763,515; surplus, £756,681. Total quick assets over all liabilities, £2,320,431. No bonded indebtedness except 159.000 unmatured on two properties which existed at time of purchase. While the company earned at the average rate of 41/2 per cent. per annum on its common stock, the management, instead of declaring dividends, deemed it more to the advantage of its common shareholders to perfect facilities for economic production while increasing surplus. Therefore, in order to keep its plants and equipment up to the highest standards, thus securing a maximum output at a minimum cost, there had been expended on plants £701,530, in addition to cost of repairs and maintenance charged to expense account.

PAINTING IRON IN DYEWORKS AND BLEACHERIES

Iron in dyehouses, bleacheries, etc., which is constantly exposed to the action of steam and acid vapors, requires special protection. Although many excellent paints are made for the purpose, it is important to observe that even the best of them may give sometimes bad resu'ts, especially if they are applied to iron that is not perfectly clean and bright. The cleaning of the iron should always be effected by mechanical means, as scraping, sandpapering, etc., and it must be dry as well as clean, when the paint is put on, and again, no fresh coat must be applied before the preceding one is perfect'y dry. The iron is best primed with hot drying linseed oil. This is followed, when dry, by a coat of red lead and boiled oil. When this is quite dry, any other color may be laid on All coats, of course, must be in a workmanlike manner applied with a proper brush, and no bubbles or uncovered places lef. If all these precautions are not taken, the painting is tim. and money wasted. All holes and cracks in the iron should be carefully stopped and levelled off with red lead made to a putty with boiled oil, as soon as the iron is clean and dry. and the fillings must be dry, when the priming is applied. The coats should never contain volatile solvents or driers. Another way of protecting iron in warm places exposed to steam is to paint the iron when cleaned and dry with a solu tion of 4.5-k, unbleached shellac and 1.36-k, horax in 4.5-l. boiling water, which is mixed just before using it with twice its volume of ordinary paint, of boiled oil and turpentine.

Graphite and boiled linseed oil make also a very good paint, the coats standing heat, co'd and acids very well.—West muster Zeitung.

AN ENGLISH IMPROVEMENT IN THE CONSTRUC-TION OF CARD CLOTHING.

In the ordinary type of card clothing the wires are put in at an equal distance apart. In the eard clothing as shown in the accompanying illustration a new method is employed, the object being to place the wires in the manner shown, so that the matted cotton first comes into contact with the wires





which are farthest apart and then passes to those which are close together, so that the working of the cotton is very geatle. In the illustration, in one method of fastening the wires into the backing, they are shown at one point d, d^4 , at a uniform distance apart, and at another point c, c^4 , at another and different distance apart, and again at f, f^4 , at still another distance apart.

RENDERING WOOL PROOF AGAINST THE COLORING ACTION OF DYES.

The following process for treating wool so that it will resist the coloring action of the dyeing liquor has been patented in Germany: 220 lbs. of woolen yarn is treated for one hour in a boiling bath of about 800 gallons of water and 55 lbs. of tannin. The yarn is then handled for half an hour at the boil in 800 gallons of water and 33 lbs. of tartar emetic: it is then rinsed in water to which has been added 61/2 lbs. of chloride of tin. It is claimed that yarn so treated will not be colored by the ordinary processes of dycing. This yarn can be used in connection with yarn not so treated in the manufacture of goods that are to be piece dyed, the result beng that fancy effects are produced in the finished goods. The "Ost. Woll. und Lein. Ind." states that it has been known for years that this treatment would reduce the dyc-absorbing power of silk, and adds that there is danger of the process injuring the spinning qualities of the wool. The wool so treated does not remain perfectly white when dyed, but the difference between the shade and that of wool not so treated is sufficient to give a contrast that can be utilized in the production of fancy effects .- Textile Mercury.

A NEW YARN TESTING MACHINE.

In the course of a lecture recently delivered by G. R. Smith, upon "Some Observations on the Testing of Cloth and Yarn" before the members of the Bradford Scientific Association, was exhibited and described an ingenious machine devised for testing yarns. About a yard of the yarn to be tested was fixed in the machine with a definite amount of tension upon it, one end