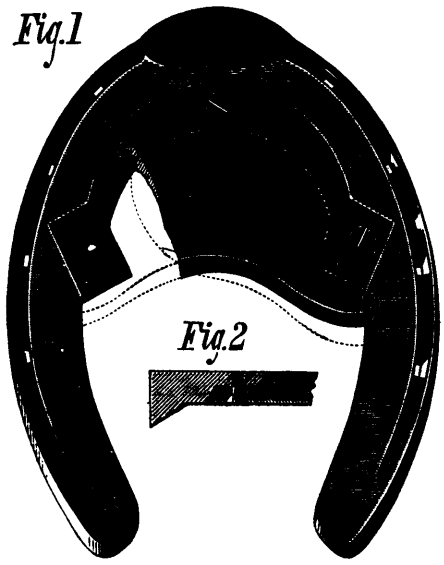
NEW WEIGHTED HORSESHOE.

The annexed engraving represents an improved weighted horseshoe invented by Mr. Eugene E. Seixas, of Galveston, Texas. The improved horseshoe is designed to be used in training a horse to trot rapidly by causing him to extend his strides. It squares his step, and may be used for preventing him from striking his knees with his feet.

In the engraving a part of the weight is broken away to show the form of the shoe under the joint, and Fig. 2 is a section of a portion of the shoe and weight taken through the joint. The weight is fitted to a rabbe or recess formed in the shoe and is held in place by three screws, so that it may at any time be removed if required.

When it is necessary to use the device for preventing the horse from striking his knees with his feet the weight is made to extend farther back upon one side than the other, as shown in the dotted lines in Fig. 1.



SEIXAS' WEIGHTED HORSESHOE.

THE HOUSE MOTH.

Of all the household pests the carpet moth, or the *tinea tapetzella*, is certainly the most powerful and persistent, and how to prevent its encroachments is a problem worthy of study. It extends its operations rapidly, taking possession of every nook and cranny, aud when it comes in contact with woollen goods or furs its appetite is simply voracious ; carpet dealers suffer much from its ravages, and many a fine Moquet or Wilton which has been "shelved" for a season, on being brought to light is found to be utterly ruined. It is only by the most careful and frequent inspections, that carpet and furniture dealers are able to hold their own against their wily enemy ; floors are thoroughly scrubbed, cracks and crevices are cleared of lint and filled with naptha, and so the warfare constantly goes on.

Those dealers who make a business of storing furs during the summer months, and who insure them against the ravages of the moth as well as from loss by fire, (the rate of insurance being five per cent. on $100) pack their goods in camphor— an excellent preventative but useless as a cure.. Valuable furs that are moth-infested are often sent to the "trader" to be worked over in sawdust and butter by the process employed in skin-dressing, and which has the desired effect in destroying the vermin.

Now the question arises, is there no exterminator in existence which we can apply to moth-ridden household articles generally ? Of course in every case prevention is better than cure, and thorough cleanliness, yearly or semi-yearly beatings of carpets, frequent overhaulings of furniture, and the liberal use of camphor, will do much to rid our houses of these pests ; but when they once have fastened themselves upon us with an evident disposition to stay, how are we to be saved from the destroyer ?

Some relief for the afflicted may be found in the fact that some four or five years ago a cleansing process was discovered, which is called the "Naptha bath," and is thus described : A large tank, with a capacity of fifteen or twenty barrels of naptha, is filled with that fluid, and heated at 180° by the introduction of a steam coil. Into this the articles to be cleansed are plunged and allowed to remain four or five hours ; when taken out not only has every perceptible vestige of the moth disappeared, but any minute larvæ which the article may have contained is effectually destroyed. Sometimes cold naptha is used in this process, but the time required for the operation is much longer.

By this process, which seems to answer in every particular the purpose for which it is intended, the finest fabrics are not injured in the slightest degree. Several concerns are engaged in the naptha cleansing business in New York, Boston and Chicago.

PROSPEROUS FRANCE.

France is affording fresh proof that she is one of the most wonderful nations on the face of the earth. The disasters of the Franco-Prussian war, and the payment of five milliards of francs as the further penalty for entering upon that war, would have crippled an ordinary nation. But France is not an ordinary one, and the result is that she has not only cast off her burden, but contemplates an outlay in internal improvements such as the most prosperous country could alone entertain It will be remembered that M. de Freycinet, the new Prime Minister of France, before leaving his old department, drew up an elaborate report embodying a gigantic scheme for the creation, extension, and union of railways and canals throughout the country. The estimated cost of these improvements is nine milliards of francs, or £360,000,000 sterling ; but France is not deterred thereby, and in twelve years the scheme is to be worked out in its entirety. Already France is noted for the completeness of her railway system, which, with her rivers and canals, afford a means of communication apparently leaving little to be desired ; but she is impressed with the belief that improvement is possible, and she is going to add 16,000 miles to her railways, and 900 miles to her rivers and canals. This fresh burst of enterprise on the part of France can have but one effect, and that is increased prosperity in the great industries already stirred into activity by the demands of India, America and the colonies. Rumour is already busy, says our excellent English contemporary *Capital and Labor* with the names of English firms about to contract with the French Government, while the iron and steel trades in America and Belgium must also benefit

THE PHYSICAL CAUSE OF INTERMITTENT FEVER.

The July number of the *Zeitschrift*, edited by Professor Klebs, contains some particulars of an investigation into the physical cause or poison to which marsh or intermittent fever is due. The inquiry was conducted by Professor Klebs, of Prague, in conjunction with Signor Tommasi, Professor of Pathological Anatomy at Rome. The two investigators spent several weeks during the spring season in Agro Romano, which is notorious for the prevalence of this particular kind of fever. They examined minutely the lower strata of the atmosphere of the district in question, as well as its soil and stagnant waters, and in the two former they discovered a microscopic fungus, consisting of numerous movable shining spores of a longish oval shape. This fungus was found to be artificially generated in various kinds of soil. The fluid matter obtained was filtrated and repeatedly washed, and the residuum left after filtration was introduced under the skin of healthy dogs. The animals experimented on all had the fever with the regular typical course. After explaining minutely the results of their various investigations and experiments, these gentlemen are of opinion that they have discovered the real cause of the disease in question. As the fungus grows into the shape of small rods, Tommasi and Klebs have given it the name of *Bacillus malariæ.—Medical Times and Gazette.*

USING INDIA INK UPON TRACING LINEN.

By rubbing the India ink in fresh water each time any considerable quantity of tracing, or, in fact, any work, is to be done, the lines will be sharp and clear. Should the latter not be the case, rub a brush upon some soap, or add a few drops of clarified ox-gall, and mix thoroughly.

None but the very best India ink should be employed in making tracings ; that which has an odour of musk on being wet is the best.