

bers, has been and is being seriously affected by our civilization must be apparent to every observer. The records show that the numbers have decreased in the successive appearances of certain broods, owing largely to the presence of our domestic animals in the woods. Then, again, the clearing of land and the building of towns and cities have all had their effect upon the increase of this Cicada. There are doubtless many places in Brooklyn, N. Y., where the insect appeared seventeen years ago in which there will be none the present year. And similarly I opine that whereas around every tree that has been planted more than seventeen years ago the insect is now abundant in Washington, it will scarcely be noticed in any part of the District seventeen years hence. I base this opinion on a new phase in the Cicada history, viz., the presence of the English sparrow. It is the first time, perhaps, in the history of the world that *Passer domesticus* has had an opportunity of feeding upon this particular brood of *Cicada septendecim*, and so ravenously and persistently does this bird pursue its food that the ground is strewn with the wings of the unfortunate Cicada wherever these have been at all numerous; so that, considering the numbers of the sparrows and their voracity, very few of the Cicadas will be left long

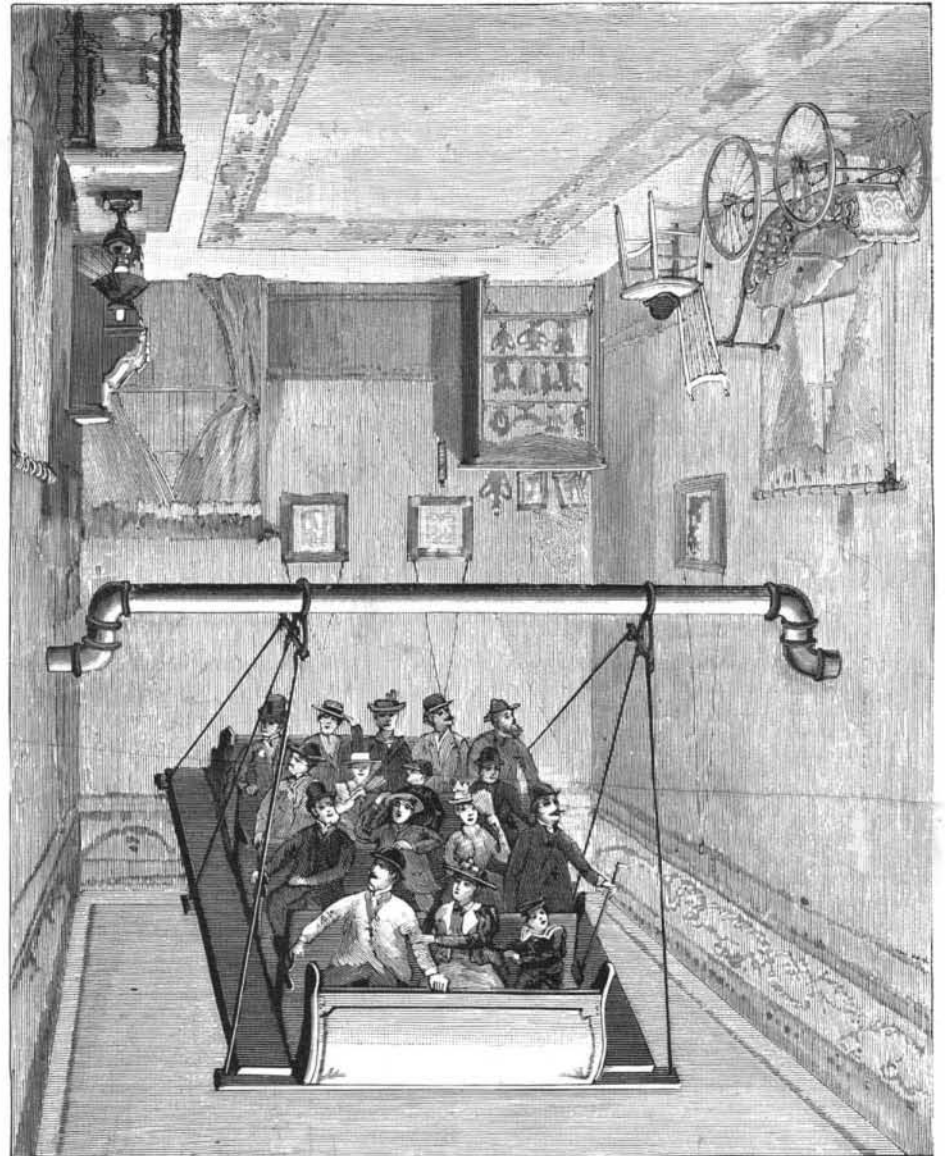
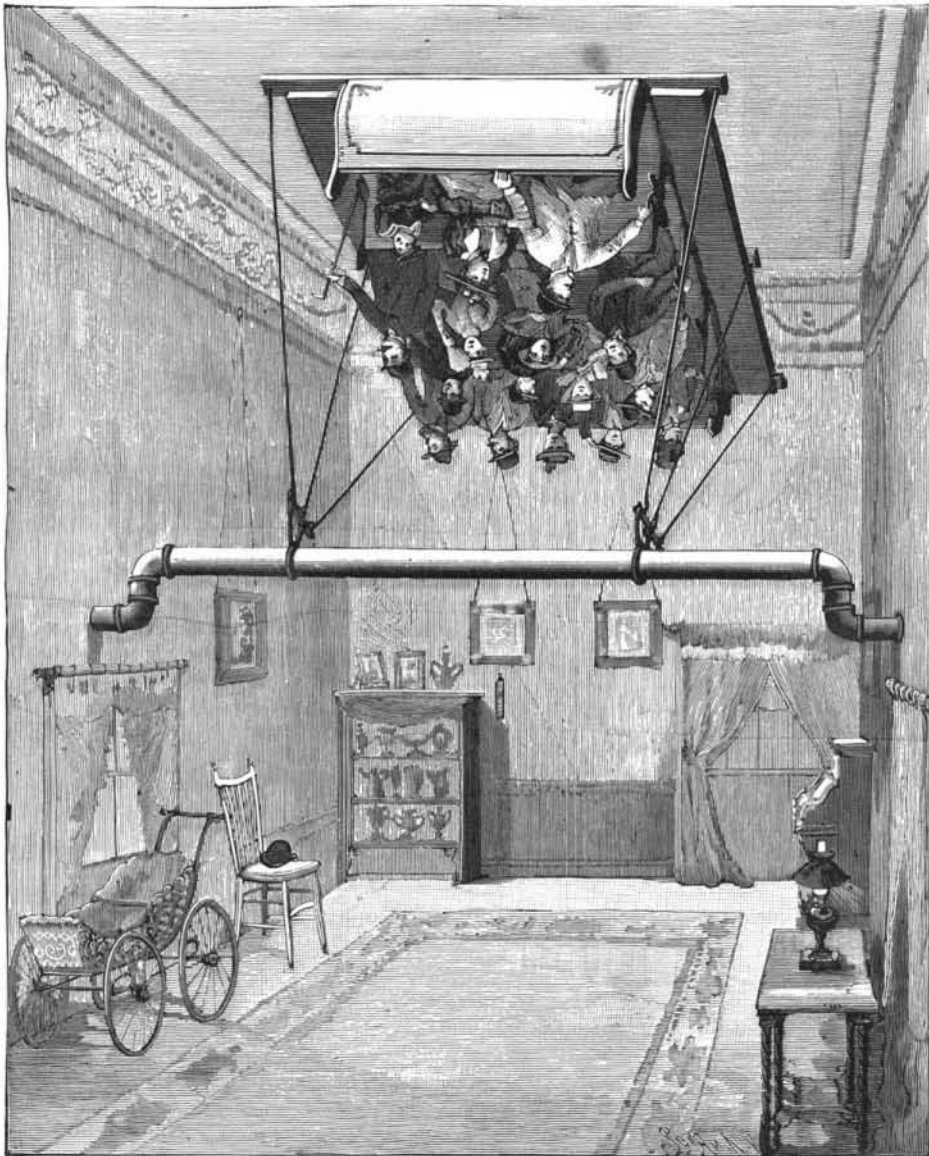
THE HAUNTED SWING.

The supreme happiness of sitting in a swing which apparently whirls around its points of support, giving the occupant what is most properly described as a new sensation, may now be enjoyed by all. A patent recently granted to Amariah Lake, of Pleasantville, N. J., describes the illusion which we illustrate. It is termed the haunted swing, and has been in most successful operation at Atlantic City and at the Midwinter Fair near San Francisco. Those who are to participate in the apparent gyrations of the swing—and there may be quite a number who enjoy it simultaneously—are ushered into a small room. From a bar crossing the room, near the ceiling, hangs a large swing, which is provided with seats for a number of people. After the people have taken their places, the attendant pushes the car and it starts into oscillation like any other swing. The room door is closed. Gradually those in it feel after three or four movements that their swing is going rather high, but this is not all. The apparent amplitude of the oscillations increases more and more, until presently the whole swing seems to whirl completely over, describing a full circle about the bar on which it hangs. To make the thing more utterly mysterious, the bar is bent crank fashion, so that

The room is as completely furnished as possible, everything being of course fastened in place. What is apparently a kerosene lamp stands on a table, near at hand. It is securely fastened to the table, which in its turn is fastened to the floor, and the light is supplied by a small incandescent lamp within the chimney, but concealed by the shade. The visitor never imagines that it is an electric lamp, and naturally thinks that it would be impossible for a kerosene lamp to be inverted without disaster, so that this adds to the deception materially. The same is to be said of the pictures hanging on the wall, of the cupboard full of chinaware, of the chair with a hat on it, and of the baby. All contribute to the mystification. Even though one is informed of the secret before entering the swing, the deception is said to be so complete that passengers involuntarily seize the arms of the seats to avoid being precipitated below. Our drawings are prepared from sketches made at the Midwinter Fair in California.

The Strike at Pullman.

The employes of the car works of Pullman's Palace Car Company, at Pullman, Ill., struck May 11, and the shops have been closed until further notice. According to the *National Car Builder*, the men demanded the res-



ILLUSION PRODUCED BY A RIDE IN THE SWING.

TRUE POSITION OF THE SWING

THE HAUNTED SWING—A CURIOUS ILLUSION.

enough to procreate and perpetuate the species in this district."

SOME REFLECTIONS ON THE POPULAR NAME.

All the leading American writers upon this insect have dwelt upon the necessity of applying correct popular terms to it, since the vulgar name of "seventeen-year locust" leads to a great deal of confusion and causes unnecessary apprehension. The term "locust" in all other English-speaking countries but our own is applied to certain devastating insects of the order Orthoptera and of the family Acrididae, to which we generally apply the popular term "grasshoppers." Some of the species are migratory and have been renowned since biblical times for their destructiveness. Biblical and general usage in other countries should serve to fix this term upon this family of insects and disconnect it from the Cicada under consideration, which produces no such disastrous consequences. "Cicada" is short and euphonious, and might be adopted into popular language as Phylloxera, Geranium, etc., have been, while a term in quite common use among entomological writers for the family of Cicadas is "harvest fly."

A BICYCLE ambulance is one of the latest inventions, and consists of a bicycle with an ambulance attached. The stretcher is fastened to the top of the bicycle, and the wounded or sick person lying on the stretcher can then be rolled along in a very gentle and safe manner.

it seems demonstrably impossible for the swing to pass between bar and ceiling. It continues apparently to go round and round this way, imparting a most weird sensation to the occupants, until its movements begin gradually to cease and the complete rotation is succeeded by the usual back and forth swinging, and in a few seconds, as the children say, "the old cat dies." The door of the room is opened and the swinging party leave. Those who have tried it say the sensation is most peculiar and the deception perfect.

The illusion is based on the movements of the room proper. During the entire exhibition the swing is practically stationary, while the room rotates about the suspending bar. At the beginning of operations the swing may be given a slight push; the operators outside the room then begin to swing the room itself, which is really a large box journaled on the swing bar, starting it off to correspond with the movements of the swing. They swing it back and forth, increasing the arc through which it moves until it goes so far as to make a complete rotation. The operatives do this without special machinery, taking hold of the sides and corners of the box or "room." At this time the people in the swing imagine that the room is stationary while they are whirling through space. After keeping this up for some time, the movement is brought gradually to a stop, a sufficient number of back and forth swings being given at the finale to carry out the illusion to the end.

tation of the rates of pay for piecework to what these had been previous to the reduction made on account of the falling off of business. A day or two before the strike President Pullman personally addressed a gathering of the men and gave them some plain statements of the conditions which made low wages for the present necessary. At the commencement of the depression last year the company employed at Pullman 5,816 men and paid out in wages there \$305,000 a month. Negotiations that were then pending for new work were stopped, orders were canceled, and it became necessary to lay off a large number of men in every department, so that by the first of November, 1893, there were only about 2,000 men in all departments, or a little over one-third of the normal number.

In the effort to keep the shops running and the workmen employed the company made lower bids than were ever before known, and by this means secured work enough to increase the force from 2,000 to 4,300 men, which was the number employed at the time of the strike. This was done by the company eliminating from its estimates the use of capital and machinery, and in many instances going below that and taking work at a considerable loss; as much in one particular case as \$12 per car and in another \$79 per car. The Detroit shops of the company were closed in order to provide work for the men at Pullman, and \$160,000 was spent since last August in carrying out a system of improvements in the town, which gave work to many.