chair, and the direction of motion was that of the pressure.

Three men, or indeed as many as could get hold of the chair, were then invited to hold it still if they could. This was the most amusing and exciting part of the spectacle. The men tried in vain to hold the chair still, while Miss Lulu simply moved around in the quietest imaginable way, touching it with her finger first here and then there, until finally the force became so great that the chair began to crack, and seemingly almost pull itself to pieces. The explanation was, however, per-There was no concert of fectly obvious. action among the four muscular holders, more than that each one tried to keep the chair still by resisting any force which he felt it to exert. A few jerks in various directions by the performer led them to begin resisting her motion by pulling the chair first this way and It was of course impossible for then that. any one holder to tell whether the motion came from the performer or from his companions. The result was, that they all began to wrench desperately against each other until the chair came to pieces.

The scientific tests were productive of the usual result, — that ghosts, spirits, and occult forces absolutely refuse to perform their functions in the presence of scientific paraphernalia. A platform had been placed on rollers in the middle of the room, and Miss Hurst was invited to set the rod in motion while she stood on that platform. Her parents were perfectly confident that she could do it, and she did go so far as to commence one feeble attempt; but the forces refused to operate, or rather the platform persisted in rolling about, and the attempt had to be given up. She then stood upon the platform of a pair of scales, the counterpoise of which was so adjusted, that, when she exerted a lifting-force exceeding forty pounds, the arm would be raised. A spectator sat in the chair in front of the scales. It was soon found, that, owing to the platform being some six inches above the floor, the chair was lower than she had been accustomed to have it: it was therefore set upon a little platform of the same height as that of the scales, so that the position was the same as if both stood on the floor. The performer pressed her hands against the sides of the back of the chair, according to custom. The motion was long in commencing, and, when it began to appear, click! went the lever of the scales, showing that a force of more than forty pounds was exerted. This seemed to demoralize the performer, and, notwithstanding a great deal

of chiding from her parents, nothing more could be done while she stood in this position.

From various allusions in the public press, it would seem that the wonderful 'magnetic girl' has not yet ceased to draw full houses. The editor of the Chicago *Inter-ocean* made a careful investigation of the case, and showed that it could not possibly be electricity which caused the motion; but he does not essay an explanation of what the force was.

Although it would be unjust and pretentious to say that no one sees the absurdly simple character of the performance, it would appear that there are many who are mystified by it, and that, should we accept the existing testimony on the subject as complete, we should be compelled to admit that some new form of force had been discovered. It is indeed possible that the absurd simplicity of the affair may help to give it vitality; for, as already indicated, not only is there no mystery or concealment, but there is not even a resort to the tricks of legerdemain, which consist very largely in distracting the observers' attention at the critical moment. The assumption, that, because Miss Lulu begins by touching the articles deftly with her fingers, she never takes them with a firm grip, is one which the spectator takes upon himself without any effort on the performer's part to cause that illusion.

This account is presented to the readers of *Science*, because, taken in connection with descriptions of the performance given by thousands of spectators, many of them critical observers, it affords the basis of a reply to those who have seen chairs, tables, and pianos dance without human agency.

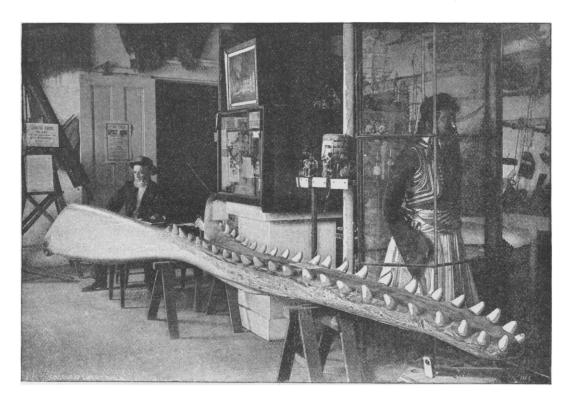
S. Newcomb.

## THE NANTUCKET MUSEUM.

The little town of Nantucket, on the island of that name off the southern coast of Massachusetts, boasts a little museum sui generis. The first thing which strikes a visitor is the extremely heterogeneous character of its collections. It is certainly amusing to see, side by side with specimens of rare interest and scientific value, such entirely valueless things as pieces of melted glass from the Chicago fire, and bits of wood from the frigate Constitution; but most of the 'curiosities' have some local value, being connected with the past whale-fishery, and were collected by the whalemen of the town in their wide wanderings. Hanging on the walls, lying on the tables and even on the

floor, are savage implements and curiosities, which cannot fail to interest the visitor, especially as they are all explained by the curator, Mr. Murphy, who has thrilling tales to tell of each separate piece; nor is the curiosity-hunter the only person who is likely to be interested in this museum. In its collection of tropical shells, there are many which cannot be numbered among the commonest; but, for the naturalist, the one thing which possesses an

Mr. Murphy describes the animal, tells about its enemy the whale-killer, its parasites and other pests, explains the process of killing the whale and cutting up and trying out the blubber, illustrating his talk either with the apparatus itself or with ingeniously made models. On the other side of the room is a small jaw twisted in a spiral direction, and bearing plain evidences of having been injured at an earlier stage. The teeth are long and somewhat



all-absorbing interest is the sperm-whale's jaw, which extends nearly across the exhibitionroom. The curator, who considers this his special pet, is full of enthusiasm for it, and claims that it is the only full-grown jaw of a spermwhale in America. It was taken in 1865 by a Nantucket whaler in the Pacific Ocean, from a sperm-whale which measured eighty-seven feet in length and thirty-six feet in circumference, and had the enormous weight of two hundred tons. The whale gave forty-five hundred gallons of oil. The jaw itself weighs eight hundred pounds, measures seventeen feet in length, and has forty-six huge teeth. These are badly worn, and prove that the animal must have been very old. In connection with the jaw,

slender, partly from the youth of the animal, partly from disuse. When taken, the whale was alive; but the lower jaw was badly aborted, and the animal was in a poor state. It must have been in this condition for years, and have lived upon what chanced to come in its way. It is to be hoped that the collection may always be well cared for, and may become more than now the nucleus of a good collection of the natural objects of Nantucket itself.

## THE 'COMMA BACILLUS' OF KOCH.

Dr. Koch has himself stated in precise terms the nature of the proof required in order to es-