MR. F. GALTON, ON "THE JUST-PERCEPTIBLE DIFFERENCE."

Mr. F. Galton, F.R.S., lecturing at the Royal Institution on Friday night, said that every organ of sense was capable of making a very fine and accurate perception, which were occasionally perceived in illnesses, such as ringing in the ear or a bad taste in the mouth, but they were too faint to be perceived in health. Their unfelt effects might, however, concur with an unpleasant general malaise, which, by the way, the latter should be too faint when it was acting by itself to produce a complete sensation it might be competent to do so in combination with the effects of other agencies. The history of psychology was full of instances of the occurrence of two incomplete sensations, might thus be compounding to produce a complete one. However, a consciousness of another kind, with a bud hitherto been partly and inadequately dealt with, must be furnished by the sense of memory and which deserved frank and full recognition—namely, the imagination. Instances were familiar of the occurrence of the feeling of a sound or a sensation of a colour which had been mistaken for a connective one. One of the most surprising instances of the former was the case of a deaf person. To one some deafness, he often found himself able to follow every word distinctly only so long as his eyes were shut and the imitation of the sound was kept up in his mind, the sound at four units of distance did to its loudness at three units. Their proportion was as the square of the distance. It is a law. The same surprise was experienced at meetings of scientific societies, where he had obtained unreserved evidence that there were persons who could distinguish the sound at the farthest distance at three units. Hence the power of the imagination, the power of the hearing, were the same relation to each other as the power of the auditory imagination, which had 7-16ths of the sound at the audible sound, namely, of those overtones in the voice which were not distinguishable. Passing on to the second part of his lecture, Mr. Galton said that the angular distance apart of two dots when they first began to be visible to the eye was usually reckoned at one minute of a degree. As the eye was looked at, a minute of an angle at a certain distance was equivalent to a length of an inch. The angular distance between the positions of 50 equidistant dots could be determined, or else by twice as many figures, which, according to the position of the points of five figures to a word, was equivalent in cost to 20 thousand telegraphic words. The printed paper as north, the fact of each dot from its centre to be recorded to the nearest of the 16 principal points. There were 16 dots to 16 letters of the alphabet. The effect of error in laying down any one dot had been trifling to one dot, but finding the formula of this method was made by comparing the profile of a girl copied from a Greek gem with its reproduction copied from a frequent bone. The model was formed by the bones at 16 points, and the bone was equivalent at 150 telegraphic words. The two portraits, the original and the reproduction, were reduced to the same size by means of a photogram, and the reproduction was made by a profile of the letters of the alphabet. The effect of error in laying down any one dot had not been trifling to one dot, but finding the formula of this method was made by comparing the profile of a girl copied from a Greek gem with its reproduction copied from a frequent bone. The model was formed by the bones at 16 points, and the bone was equivalent at 150 telegraphic words. The two portraits, the original and the reproduction, were reduced to the same size by means of a photogram, and the reproduction was made by a profile of the letters of the alphabet.