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Improvement in Machines for Forming Rings, Watch Case Centers, etc.

The object of this machine is to furnish a convenient tool for the use of manufacturing jewelers and for watchmakers, although it may be applied to other purposes. It is extensively used by the patentee in making finger rings. The diameter of the ring to be formed and the pressure exerted upon it can be both adjusted and regulated, while the machine is being operated, by simple and easily managed devices.

In a frame are two horizontal shafts, projecting through on one side for the reception of forming rollers of any shape desired. On the other ends are gears connecting the two shafts so that they revolve in opposite directions, and the power, whether hand or steam, is applied on this side. The upper shaft runs in adjustable boxes, by which it can be raised or lowered at pleasure. Concentric with the lower shaft there are, on the roller face of the frame, two curved slides working in corresponding guides and carrying, at their upper ends on studs, two rollers, which work in conjunction with those on the ends of the shafts, and on their lower ends are pivoted arms, the other ends of which are pivoted to the faces of two gears meshing one with the other. A handle on a supplementary gear connecting with one of these serves as a means to operate the gears and the curved slides.

It will be seen that by actuating this handle the rolls of the curved slides will simultaneously advance toward or recede from the circumference of the roll on the upper horizontal shaft, determining the diameter of the ring to be formed, and exerting any pressure required on its interior and exterior surfaces. The machine works equally well when turned in either direction; the direction of the power may be changed at will while rolling a ring either by hand or power; in the latter case by means of two belts, as is the pattern of a planing machine.

For forming finger rings, bracelets, and watch case centers this machine is specially adapted. Heavy machines can be built for bending carriage and locomotive wheel tires. The "set" of the adjustable curved slides may be held, if required, rigidly in place to roll any size.

Patented through the Scientific American Patent Agency, April 28, 1868. Further information may be obtained by addressing the patentee, W. H. Peckham, manufacturing jeweler, 12 Dutch st., New York city.

WHAT IS PLANCHETTE?

A peculiar class of phenomena have manifested themselves within the last quarter of a century, which seem to indicate that the human body may become the medium for the transmission of force to inert and dead matter, either in obedience to the will of others, or by the action of the nervous power upon the muscular system, in such a way that those through whom or from whom it emanates, are totally unconscious of any exercise of volition, or of any muscular movement, as acts of their own wills.

The spirit with which scientific men have looked upon these phenomena, has been unfortunately such as has retarded their solution. Skepticism as to their reality, although corroborated by evidence that would be convincing upon any other subject, refusal to investigate, except upon their own conditions, and ridicule not only of the phenomena themselves, but of those who believe in them, have marked their course ever since these manifestations have laid claim to public credence. Such a spirit savors of bigotry. The phenomena of table-tipping, spirit-rapping (so called), and the various manifestations which many have claimed to be the effect of other wills acting upon and through the medium of their persons, are exerting an immense influence, good or bad, throughout the civilized world. They should, therefore, be candidly examined, and if they are purely physical phenomena, as has been claimed, they should be referred to their true cause. This is due to truth, and the common duty which all owe to their fellow men.

The following extract from an English journal, relative to the proposition made by Prof. Faraday, in 1861, to investigate the phenomena reported to have occurred in the presence of Mr. Home, a celebrated English medium, and also relative to the controversy which is now in progress between Prof. Tyndall and Mr. Home, in regard to a similar investigation, which Prof. Tyndall expressed himself willing to undertake, under similar conditions to those stipulated by Prof. Faraday,

will sufficiently exhibit the manner in which scientific men have been disposed to treat such subjects:

"He (Mr. Faraday) felt a profound contempt for the whole thing, for which we are by no means inclined to blame him; and he seems to have been a little annoyed at the attempt to draw him again into what he considered ridiculous and futile investigations. It is likely that if Prof. Owen were invited to lecture on and dissect Barnum's woolly horse, he might reply somewhat tartly; it is not improbable that Sir John Herschel would chafe at being invited gravely to investigate Parallax's theories about the shape of the earth and its rela-

some way, by virtue of his pretensions, exerting a vast influence upon society, tending to subvert creeds and to introduce new codes of morals, Prof. Owen could not do the world a greater service than to demonstrate to the world, by cutting him up, and thereby cutting down the falsity of his pretensions. Nothing that affects the welfare of mankind should be considered beneath the notice of a true philosopher. What incalculable benefit might have resulted if the same amount of study had been given to the subject of witchcraft, at the time of its occurrence, that has since been bestowed upon it. When such things become matters of history, there are always enough who do not think it derogatory to their dignity to devote their time to speculation upon their causes. How much wiser is it to throw aside prejudice, and to look at the facts themselves in a spirit of candor, and earnest desire for truth.

The latest of the phenomena belonging to the class alluded to above, are those exhibited through the agency of the "Planchette." We purpose in this article to give a brief description of this singular instrument, and also to describe some of the remarkable things which it appears to perform. In thus opening our columns to the discussion of the subject, we say at the outset that we desire any communications that may be called forth upon this matter,—which we know to be attracting great attention in both hemispheres,—to be written with an evident purpose to add to the knowledge already possessed by the public in relation to it, or to give some rational explanation of the cause of the phenomena, which are generally considered so inexplicable. And we further beg correspondents to remember that ridicule is not argument, that it only tends to exasperate, and we assure all who are disposed to deal in that style of discussion, that hard heads, and men of the most materialistic tendencies, have been puzzled and nonplused by the maneuvers of Planchette. The name Planchette is of French origin, and signifies literally a little board. We have seen several styles, differing from each other only in trivial details, the general form being the same in each.

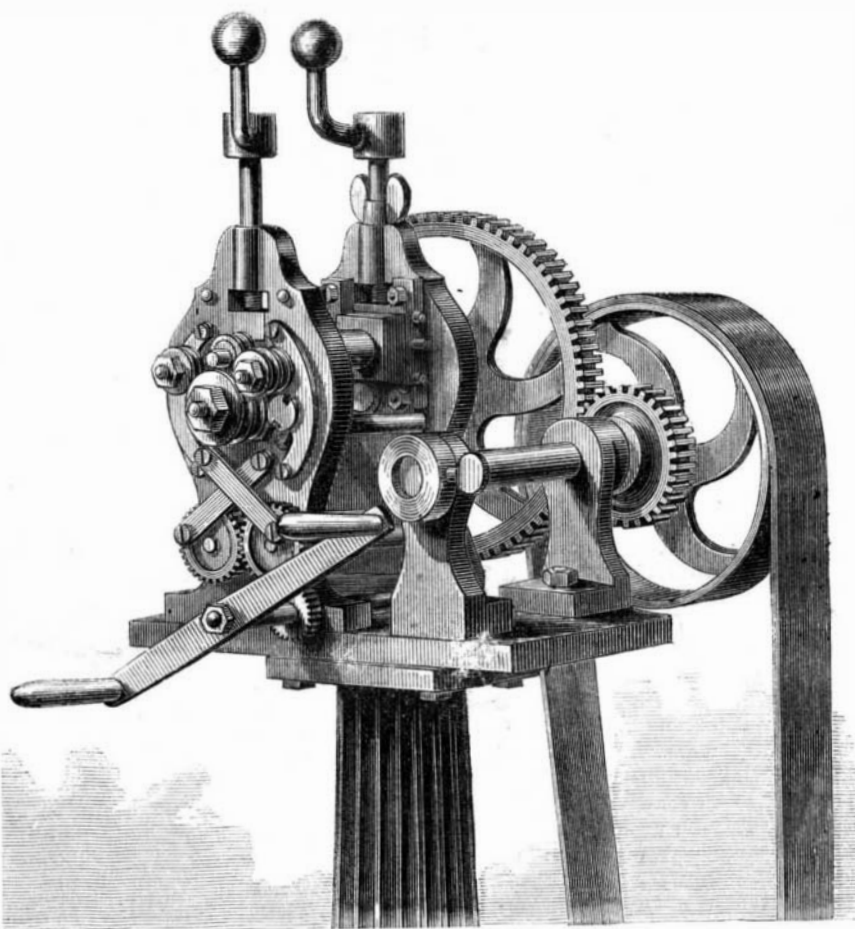
It will be seen by reference to the cut of the instrument, which we give herewith, that it is a heart-shaped piece of board, mounted upon three supports. It is seven inches from the depression in the base of the

heart to its apex, and seven inches measured across its widest part. Two of the supports are legs of wood or brass, terminating in pentagraph wheels or casters, usually of iron, bone, or hard rubber. The third support is a pencil thrust through a socket at the apex of the heart. Makers claim that the wood used in their manufacture is peculiar, whether artificially rendered so or otherwise we are not informed, but we have been unable to detect any peculiarity in the appearance of the wood in any that we have seen. Those that we have met with look as though they were made of mahogany or black walnut, lightly varnished, and with little attempt at adornment. In the center of the board we have occasionally seen a disk of metal, having the appearance of German silver, but whether it was for use or ornament, we are unable to say.

The instrument is usually operated by two persons, or perhaps we should say it generally operates when two persons lay the tips of their fingers gently upon it. Occasionally it operates with less force when only one places his hands upon it, and it has been asserted in some of the English journals, that there have been instances of its working when a string was attached to one of the legs, the remote end being held in the hand of a powerful medium, at some distance from the machine.

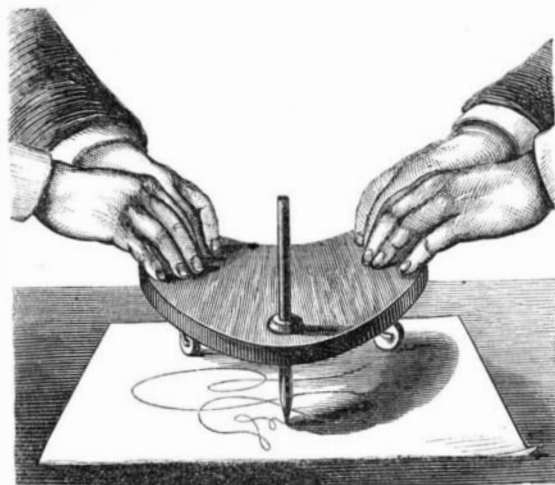
The phenomena attributed to the Planchette are various, but they consist essentially in writing and drawing. The latter we have never witnessed, but we state it upon good authority. In fact, the wonders of Planchette are backed by the statements of the most reliable people—statements which constitute such a mass of evidence that we should feel bound to accept the facts stated, even though we had not witnessed them ourselves.

You may hold a conversation with Planchette, provided your own part in it consists of interrogations. Its replies, so far as we have seen, are sometimes true and sometimes false. So are the replies often given by human respondents. It sometimes refuses to write at all, and plays the most fantastic tricks, in apparently willful disregard of the feelings of those who are anxious that it should do its best. When, however, it chooses to be good, it moves gently and steadily over the



PECKHAM'S PATENT FORMING MACHINE.

tions to the planetary system. Mr. Faraday did reply in language which was not encouraging. He prescribed certain conditions which it would have been utterly impossible for Mr. Home to accept, whether that gentleman be an apostle of a new science, or a mere pretender and humbug. In fact, Mr. Home was invited, as a condition precedent to Faraday's entering on the investigation, to acknowledge that the phenomena, however produced, were ridiculous and contemptible. He was also required to pledge himself to the most entire, open, and complete examination—a condition which, of course, Mr. Faraday knew quite well Mr. Home could never



accept. So the gentleman who was apparently acting for Mr. Home—we believe, the late Mr. Robert Bell—declined going any further; and it does not appear that Mr. Home was particularly consulted in the matter at all. At the present moment, Mr. Tyndall offers to investigate the phenomena, but he offers to do so 'in the spirit of Mr. Faraday's letter'; and, of course, Mr. Home replies that 'as such spirit is not that of logic, nor according to the true scientific method,' he declines to lend any aid to the inquiry."

Now we believe that if Barnum's woolly horse was in