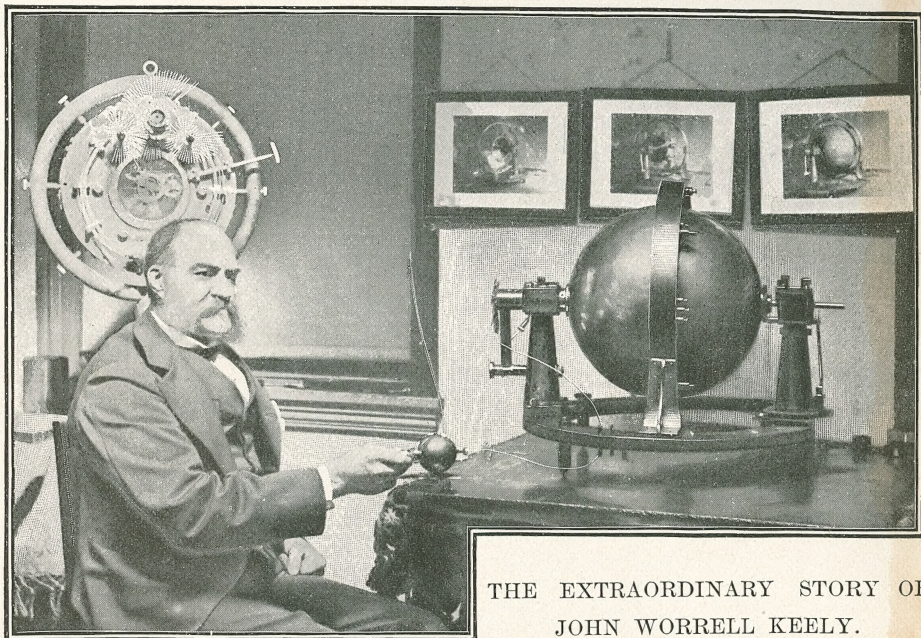




THE EXTRAORDINARY STORY OF JOHN WORRELL KEELY.

BY JULIUS MORITZEN.

PARADOXICAL as it may seem, a century which has seen a Fulton struggle with an unbelieving public, a Morse bringing commercial value to bear on the electric force, has witnessed also a rainbow-chasing multitude whose greed for gain made everything seem plausible—provided the “genius” at the helm had the magnetic strategy, necessary as well to his own sustenance and compensation. The passing of John Worrell Keely, whose recent death came as a crushing blow to those with faith strong enough to endow a tuning-fork or a harmonica with mechanical powers equal to a Niagara, has removed a character as unique as he was puzzling. And yet in his particular case the offspring of his brain did not even attain to the dignity of a patent office applicant. Nevertheless, millions of money sprang to the assistance of the Keely motor project when in the zenith of its quarter-of-a-century existence. Coffers, double-barred to rational undertakings, unlocked instantly at the sound of a phraseology, incomprehensible as it was beguiling.

The specter of the Keely motor stalks yet abroad. The death of its maker; the

exposures and contradictions; the opinions of well-known men of science; the clinging to straws by those unwilling to admit financial loss—all the swift following incidents in one of the most remarkable transactions the world has ever known—conspire to a lease of notoriety good for many days.

John Worrell Keely was, in truth, a genius. His masterful capacity for keeping some of the world's greatest scientists a-guessing; his command of capital, unlimited at times, with which to carry on his “researches”; his letting it remain for the grave only to tell the secret he did not hold—this, and more, required a brain quite out of the ordinary, and an eye with the cobra's hypnotic charm. Nothing demonstrates more conclusively this overpowering personality of his than the lapse of time, from November 10, 1874—when, in the presence of a dozen well-known Philadelphians, his “vibratory generator” was first exhibited—to the yesterday when Keely stood before another great scientific gathering and “explained” something that was never to be explained. Now, with one fell blow the scythe of death

has cut down the maker and his model. As a result, perhaps, another life went out of its earthly sphere as well. For that Mrs. Bloomfield Moore was heart and soul in the Keely project, the words of Henry Dam, the eminent scientific writer, testify, when he said, shortly after the death, that he had felt intuitively that when Keely died Mrs. Moore would not long survive.

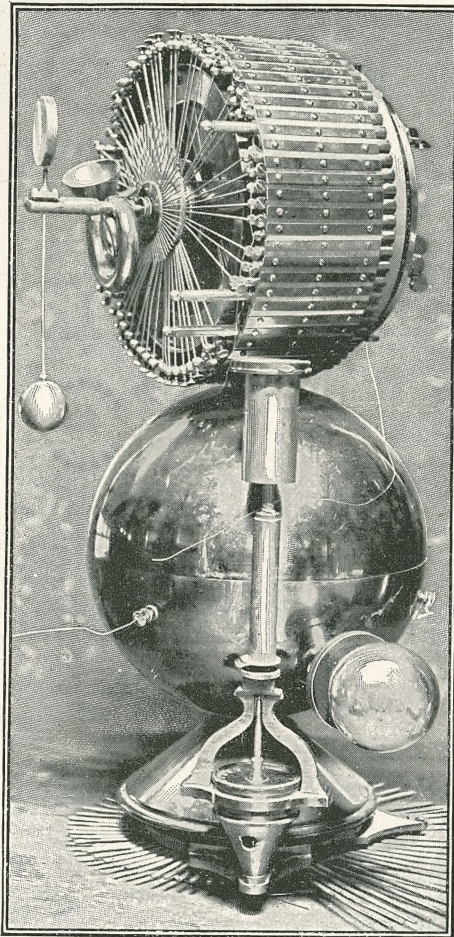
It matters not a great deal what was the agency employed by Keely when in the act of demonstrating his "hydropneumatic-pulsating-vacue engine." Was it compressed air, hydraulic power or electricity? The recent exposures of trickery on the premises point strongly to the former conjecture, but the probability is that the exact *modus operandi* will never be absolutely established.

Bringing the history of the Keely transactions down to the latest developments, the removal of the machinery from the premises occupied by the "inventor" stirred up matters as its remaining could never have accomplished. In the safekeeping of a friend of Keely's, in Boston, the motor's future is as obscure as if it had never been contemplated by its erstwhile maker. But the scenes enacted at the vacated workshop; the exposures; the controversies; the violent persistency with which the investors still cling to probabilities that do not seem even possibilities when viewed from an impartial standpoint; the discovery of the hidden tubing, which came about immediately following the removal of the motor—

all this has furnished experts an opportunity for advancing theories that nevertheless do not explain everything it is desirable to have explained.

When Clarence B. Moore, the son of the late Mrs. Bloomfield Moore, came to the realization that the memory of his mother was linked too closely with her interest in the Keely project, to which he had persist-

ently been an antagonist, he resolved that now or never was the hour for exposing the trickery which he was convinced lay at the bottom of the thing. Keely's house was rented and investigations were begun. Leading Philadelphian scientists assisted in the work, and the first discovery came in the shape of an immense steel globe. Almost covered with dirt and rubbish, it was held down in the earth of the cellar by heavy beams. When relieved of its incumbrance, the sphere was lifted out of its resting-place, and subsequently was found to weigh more than three tons. On the top of the globe a hole was discovered and, screw-threaded, the cavity gave a wider diameter the farther penetrated.



THE TRANSMITTER.

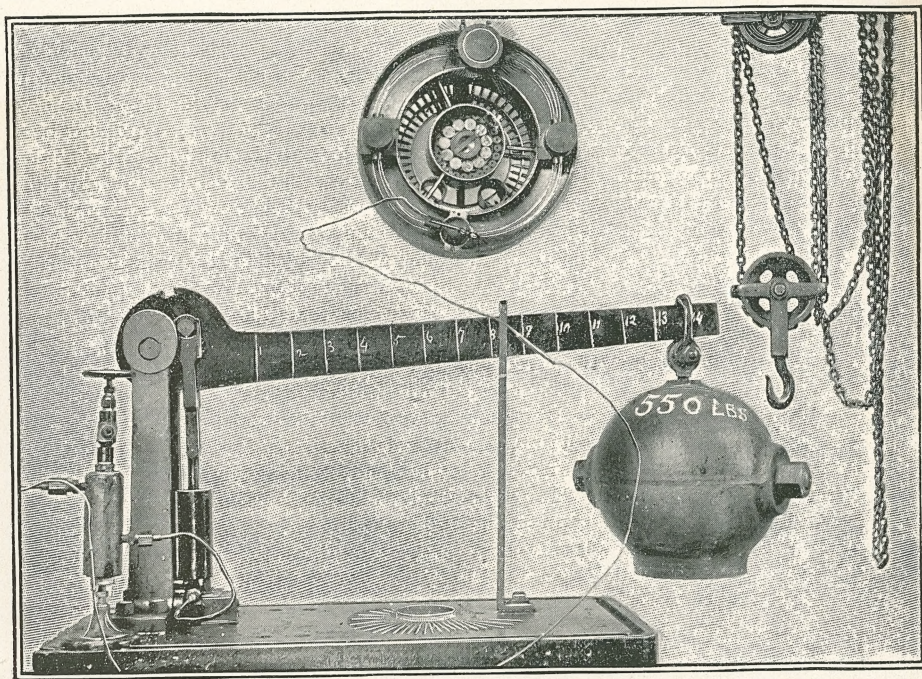
Immediately near the sphere was found an iron pipe which led for a distance of more than fifteen feet into the space under the front room. Here was discovered a pit lined with wood and covered by a trap-door. Fresh ashes gave evidence of a careful demolition of material not thought valuable enough for removal, and yet necessary to have out of the way. In these ashes, however, were found short sec-

tions of what at first was considered to be wire, but subsequently proved to be brass tubing. A large amount of glass tubes was likewise found in the debris. The fragments left behind gave striking evidence of the care exercised in removing the Keely motor machinery from its home.

The next day, still greater results rewarded the searchers of the premises. The room in the rear was curiously raised above the others, and this was the apartment in which Keely conducted all those experiments which had puzzled the world until his death.

psychology at the University of Pennsylvania, and Mr. Moore, who had the investigation in charge, the nature of what had been laid bare now came in for earnest consideration. It was determined beyond a doubt that the tubing, and the spherical reservoir found in the cellar, stood conclusively for the argument that compressed air might easily have accomplished all that had been demonstrated so mysteriously by Keely.

But before entering upon the more detailed account of what came of the exposure, it becomes necessary to revert to



"DISINTEGRATOR," AND LEVER FOR MOVING THE ENERGY OF THE "DISINTEGRATED" WATER.

When the floor was torn up, the revelation was complete. Through the joists, in holes specially cut for the purpose, ran a short brass tube. Other tubes were discovered also, and the whole went to show that the motor had been connected here with the spherical contrivance in the cellar.

In the presence of Prof. Arthur W. Goodspeed, professor of physics at the University of Pennsylvania; Prof. Carl Hering, one of the most eminent electrical engineers in the country; Prof. Lightner Witmer, professor of experimental

the year 1872, the year when the Keely Motor Company was organized, and the enthusiasm anent the "new force" brought into the fold men whose very names at that period stood for common sense and perspicacity.

At the Fifth Avenue Hotel, New York city, a meeting was held, presided over by Edward B. Collier, a lawyer, who in his particular line of patent attorney had from time to time come in contact with inventors struggling for a hearing. The meeting was composed of bankers, merchants, scientists and practical engineers,

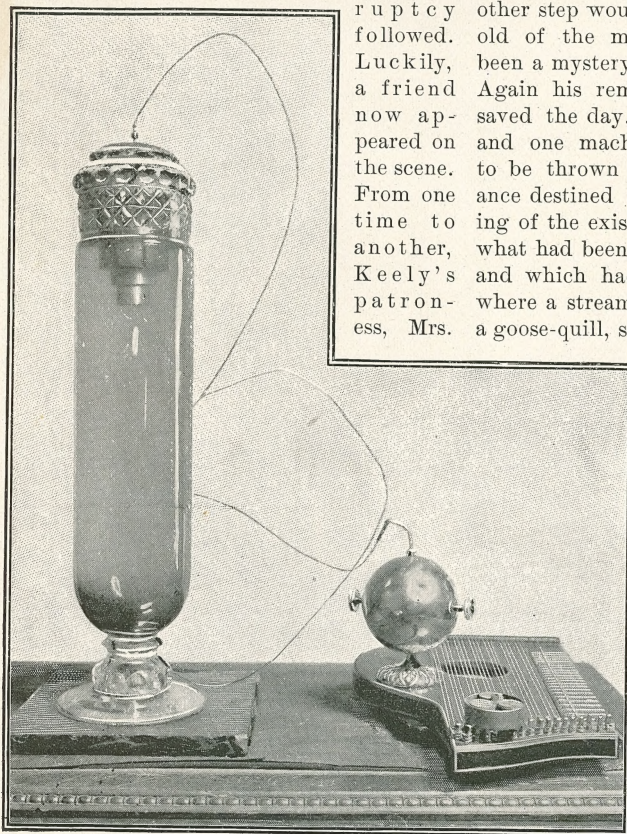
and the result was satisfactory, from a Keely point of view. The project gained substantial assistance. Money was subscribed, and the following day there was placed in the hands of Keely a check for ten thousand dollars; which, to do him justice, he immediately expended for machinery, or material necessary for the construction of his peculiar apparatus. In fact, whatever the vagaries of the man, however much his ideas may have been beyond the limit of common sense, that Keely spent the money which he obtained in experimental investigations cannot be denied even by the most strenuous of his opponents at that time or now. Small consolation this, to the many who fell victims to the smoothness of his speech or the incomprehensible language which he employed. At any rate, after being launched, the motor project soon found itself in deep water. Funds began to get low, and bank-

ruptcy followed. Luckily, a friend now appeared on the scene. From one time to another, Keely's patroness, Mrs.

Bloomfield Moore, who was left the executrix of her husband's will, advanced the "inventor" large sums out of the fortune accruing to her from the estate. Now and then a halt was called, to be sure, but the persuasiveness of the "inventor" would make her rally to his assistance once more, and another lease of life would be accorded to the motor.

A great public exhibition was given in Philadelphia, but while enthusiasm ran riot among a certain clique, skeptics were plenty and the persistency with which Keely would refuse to admit any one into his secret caused a suspicion—which, nevertheless, did not prevent a famous Philadelphia physician from advancing his individual check for ten thousand dollars. This was in 1881. In 1890 the stockholders began to grumble, and something had to be done to save the cause. Keely had just declared that he was on the eve of success; that another step would bring him to the threshold of the mystery that until then had been a mystery even to him, he admitted. Again his remarkable force of character saved the day. The work was continued, and one machine followed another, only to be thrown aside for some new contrivance destined to assist in the revolutionizing of the existing order of things. As to what had been known as the "generator," and which had been part of a bath-tub, where a stream of water, passing through a goose-quill, set the contrivance in motion,

the more significant name of "liberator" was now bestowed on the machine. A peculiar feature of the "liberator" was a series of tuning-forks, with the vibrations of which Keely claimed to disintegrate air and release an etheric force capable of rivaling a cyclone in strength if properly utilized and applied. In explanation of what one visitor saw upon one occasion, this individual said that a pint of water poured into a cylinder seemed to work great wonders. The gage showed a pressure of more than fifty thou-



GLASS CONTAINING WEIGHT WHICH KEELY CLAIMED COULD BE MOVED UP OR DOWN BY STRIKING THE ZITHER STRINGS.

sand pounds to the square inch. Great ropes were torn apart, iron bars broken in two or twisted out of shape, bullets discharged through twelve-inch planks, by a force which could not be determined.

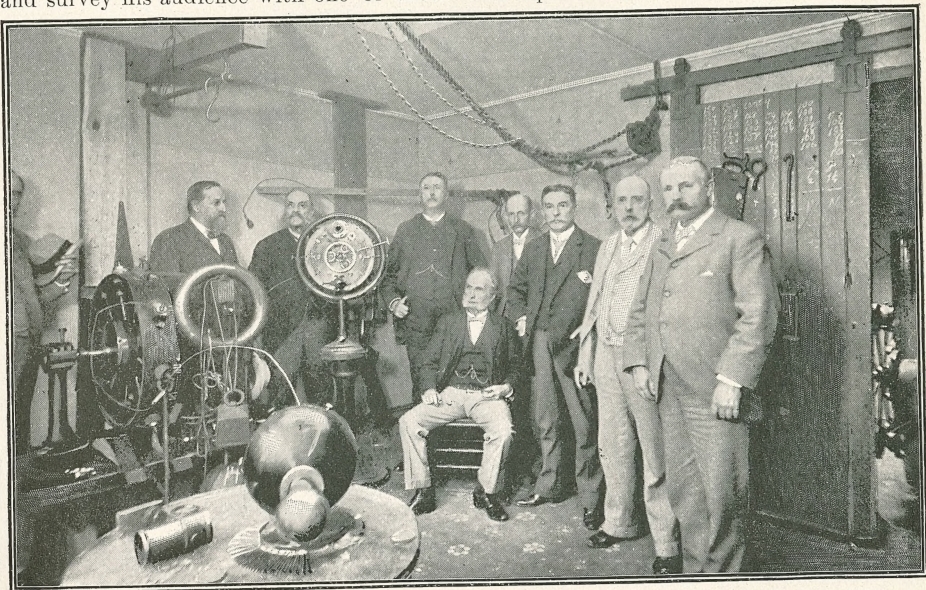
In the glory of his exuberance, Keely now declared that with one quart of water he would be able to send a train of cars from Philadelphia to San Francisco, and that to propel a steamship from New York to Liverpool and return, would require just about one gallon of the same.

It was worth almost the price of falling victim to hear Keely at the time theorize, expostulate where it became necessary, and survey his audience with one of those

value to the man who had brought the "invention" into the world. No matter how complicated the phraseology, they would allow for the possibilities in store.

Keely's excuse for not allowing any one into his secret, was based upon the commercial value, which he claimed he desired to have unimpaired for the benefit of the stockholders. It surely would not do to reveal a secret that might prove its own financial defeat, he argued, with emphatic reverence for his own invention, and for the glory and gain in store for those willing to abide their time.

The personality of John Worrell Keely was replete with the charm of heartiness.



KEELY AND BOARD OF DIRECTORS OF THE KEELY MOTOR COMPANY.

superior glances which meant to illustrate that he half pitied those who failed to understand his vocabulary. In one respect he was scientific in his procedure of explanation, and in other respects he was quite the reverse. Unquestionably he had read considerably on the subject of locomotion and kindred matters, which might stand him in good stead. But when it came to "molecular vibration," "sympathetic equilibrium," "oscillation of the atom," "etheric disintegration," and a thousand and one similar terms for his motor force, the average mind found its receptive powers hardly equal to the occasion. Then it was that the friends of the motor showed their

His was the secret of the promoter's art. He had the insight necessary to the man of affairs, minus that quality of subjection which tells it is time to cease before it is too late. And when considered in this connection, that no one was ever taken absolutely into his confidence, it still remains a mystery how his following continued almost the identical one that stood by him from the conception of the scheme to his death, and after.

When at work in his laboratory, coatless, his grimy hands exhibiting labor's hallmark, Keely looked the personification of the master-craftsman, anxious to wring from the regions of the attainable the

secrets those regions might contain. But when it came to the demonstrating feature, the séance consequent to such exhibitions as once in a while were required, then credulity had to step to the front and make room, as an advance-guard, for the true disciples who stood ready to believe, even sometimes against their own convictions. And when his benefactress implored him to let such men as Mr. Edison into the secret as an evidence that there was no humbug, Keely knew what was best for him, and treated the advice as not worthy of consideration.

Keely possessed few traits of the typical inventor. He lived a life of comparative ease, and the opulence that he displayed led the suspicious to believe that things were not as they ought to be.

And so in that Philadelphia laboratory this man built theories out of metal, and turned metal into theories which, undoubtedly, baffled his own, charitable enough, understanding. The nooks and corners of his workshop could tell of hours spent in chasing the elusive force—provided Keely had been his own worst enemy, and attempted something which he really expected to attain. But it is here that the most momentous question comes to the fore. If he really did believe in his own theories, the discoveries which have been made defy that proposition. And if he was a charlatan, his career will prove one of the most stupendous impositions ever practised by man.

The scientific nomenclature employed by Keely would have necessitated the reconstruction of the latest dictionary to cover his terms and sentences. If his dreams had

come true, "etheric disintegration," "quadruple negative harmonics," "atomic triplets," and the like, would have become part of the teachings in a new curriculum of its kind. But fate decreed otherwise. The "miracle" produced by the drawing of a bow across a string, whereby he claimed to harness or release the force of air and water, the "miracle" of controlling the elements, ceased to exist when he passed away.

Keely's education had been limited to a degree. A carpenter by choice of trade,

he had a penchant for mechanics from an early age, and it is said by

those who knew him in his youth that his ear was musical enough

to have been the means of placing him in the

conductor's chair of a small orchestra,

at one time. But while those

curious musical charts which he

drew, with no small skill for

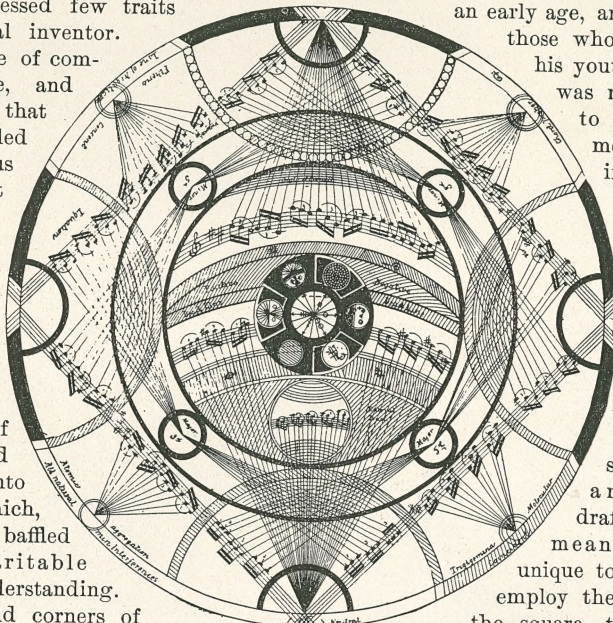
an amateur draftsman, may mean something

unique to the men who employ the compass and the square, to others they

merely illustrated a trend of mind into a domain where mortal should not venture.

It should not be forgotten that Keely predicted that the flying-machine, for which the century has been waiting, would come to pass the moment his motor stood completed. And in the same way he asserted that his pneumatic gun was the one and only instrument of its kind for governments to make use of—as soon as the motor power he had in mind had been produced.

The construction of the motor plant was nearly all his own doing. Composed of the motor proper, and the transmitter, the machine rested on a heavy brass base. Here, too, was a hollow brass sphere or ball.



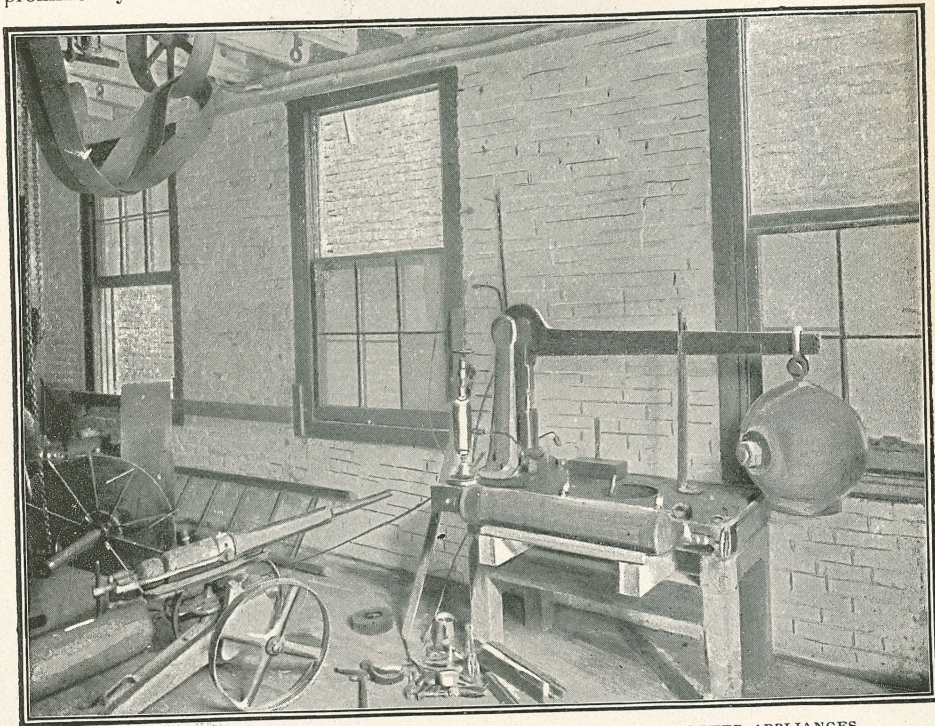
MUSICAL CHART BY WHICH KEELY CLAIMED TO HAVE DISCOVERED HIS "ETHERIC" FORCE.

Between the engine and the transmitter ran a series of wires, and along the base of the transmitter an array of steel rods bristled like so many fixed bayonets ready to repulse the attacks of the incredulous. These steel rods were responsive to the touch, and compared to the ordinary musical scale, which is subject to the tuning-fork.

The interior of the globe almost defied description, but out of the complex mass brass tubes and adhesive plates stood prominently. This was the shifting reso-

flow of talk about "finding a neutral center," and the like, the performance did not fail to do the work intended. But while the harmonica was supposed to have done the whole thing, starting up the machinery by "etheric force," the exposures recently brought about admit of the supposition that a concealed rubber bulb in the floor was the instrument used. Keely might easily have shut off or released his compressed air by placing his foot on parts of the floor best known to him.

It might be taken for granted that the



GUN WITH WHICH KEELY EXPERIMENTED AT SANDY HOOK, AND OTHER APPLIANCES.

nator, as Keely termed it. The tubes and plates took up the vibratory sound and carried it along with rapidity. Of these vibrations there were seven distinct kinds, said Keely, and each of these seven capable of infinitesimal division.

The motor itself consisted of a heavy iron hoop, placed firmly on the plate. Within this hoop ran a drum with eight spokes. When it was once in operation, the movements of the drum were exceedingly rapid and did not fail to impress. Taken in connection with Keely's simultaneous

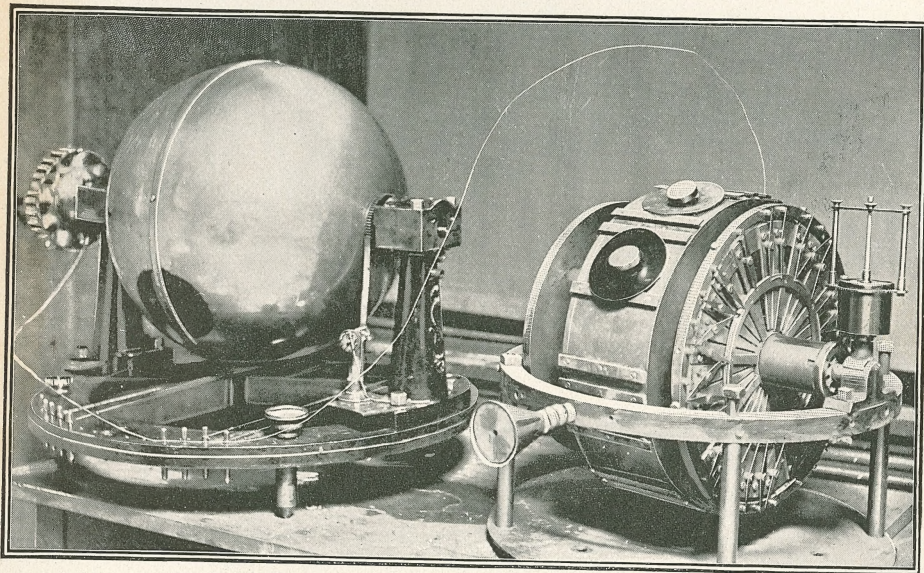
element still faithful to the apostle's memory are not giving up without a struggle. They aver that the sphere found in the cellar was known by them to be there. One enthusiast goes so far as to say that he knew that Keely, having demonstrated his power in lifting the globe, reversed the experiment and pressed it down in the ground. The heavy beams, which held the sphere in place, rather controvert such a statement.

Since that midnight visit to the dismantled shop of the late John Worrell Keely,

the scientific opinions advanced are of considerable importance, whether bearing upon his motor or his individuality. Renowned professors of physics have stated that they have been convinced for years that the method was compressed air. A medical journal of high standing, in discussing the matter from a psychological point of view, says that rather than make out a case anent Keely it were better to follow the psychological development of his dupes. Continuing, this jour-

of a good patent-right. He was not an honest lunatic. He reaped substantial gain from his secrecy, for he ran a joint-stock company."

To all intents and purposes this stock company is still intact, but the action of the Keelyists did not restrain one holder of a hundred shares of stock from disposing of his certificates for a few dollars. The buyer could find a purpose even in the stock paper, however, for it went to the papering of his house. And now, while



GLOBE MOTOR AND PROVISIONAL ENGINE.

nal says that the psychology of most inventors usually brings them out too soon rather than too late. "Critics and scientists who may feel inclined to work out the problem of Keely's psychology should remember that insane inventors do not act in any way like Keely," is the exact language of this medical authority. "Their schemes are usually divulged prematurely and they do not hesitate to reveal their wondrous secrets to the world under the protection

the machine is in Boston, in the keeping of a friend who is supposed to have known Keely's secret, it behooves to recall the memory of Robert Fulton, through whose alertness it became possible to unearth the perpetual-motion fraud of Redheffer, the impostor who in his time was no less a sphinx than Keely. Only, with the discovery of his imposition Redheffer took to flight. Keely had to die to be discovered.

