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In 1923 Louis de Broglie held his Ph.D. thesis on what then was known as the de Broglie's hyothesis, assuming that particles of matter also behave like a wave, with a wavelength associated.

This is how a tractor beam is possible.
If you understand this and have the knowledge to work with a Klystron tube then contact me and I will reveal the rest. I am looking to put larger waves on a lake which I have done already but only small ripples.

Both uncertainty principle and double-slit interference are the most important contents in Quantum mechanics.
https://www.physicsforums.com/threads/uncertainty-principle-and-double-slit-interference.222893/

Errors:
Physics comparing to sound waves which do not have wind. And wave forms seen on the oscilloscope.

https://en.wikipedia.org/wiki/Correspondence_principle

Much of physics is designed around the fact that photons pass directly through another unaffected.
The errors all came from the double slit. The problem is they assumed that photons pass through another unaffected. This is a simple dumb mistake make many years ago and covered in the Copenhagen Interpertaton of Quantum Mechanics.
I will show that photons under special circumstances can bounce off another and be re-directed into paths that make the interference pattern. The interference pattern is not from

The interference pattern cannot be made from two different sources of monocromatic light. it must come from one source that has been split in half. Only then will they interfere. Water waves from two different sources will produce an interference pattern by addition of waves. Assumed light was like water waves is a huge mistake. They are not the same.

Fatal Flaw in Physics.
Water waves were used as a model for understanding the behavior of light waves. A water wave is a pulse of energy through water. It has a crest and a trough. The distance from crest to crest is

known as the wavelength. Scientists study waves with a device called a “ripple tank”. A ripple tank is used to understand the interference of light waves which causes the rainbow colors on a soap bubble or a film of oil. The foundation of physics was designed around the belief that water waves are like light waves and pass directly through another unaffected.

Two Types of Simple Waves:
Early ideas about light and water fooled men of physics and the theory or mechanism of magnetism and gravity have never been explained properly. Ripple tank water waves are like sound waves in air. Sound waves do not produce a wind. They only have pressure waves. If a pebble is dropped into water it makes a wave like sound waves. They do not flow. This type of wave can be seen on a rope that is attached on both ends.

That is the error. The correct type of wave to study is one that travels, like that of an ocean waves which carries its water with it. A floating object placed on the surface of this type of moving wave will be carried along with the wave. Conversely if a floating object is placed on the water of the waves of a ripple tank it will only undulate or just go up and down, going back to their original position not traveling forward any distance.

Traveling water waves carry their mass with the wave. This difference between the two wave types is essential when studying light. The ripple tank scientists study does not protray light which propagates. Knowing this, a force can be put back in gravity, and magnetism can be explained, which to this day is not fully inderstood.

When the early pioneers of science saw light beams passing directly through eachother and dropped pebbles into a pool of still water they looked similar. However this is not the case. Light cannot be compared to ripple tank waves that just move up and down or sound waves that have no wind. Light travels like moving ocean water waves. Ocean water waves that bring water along with its wave crash into another while passing through another. When two ocean water waves pass through another they crash into eachother first doubling in height then pass through. This mistake is shocking and still carried on today. If you Google this you will find that the theory of magnetism has never been explained properly, and general relativity’s theory of gravity has no force associated with it. It can be shown that light waves under more refined and defined experimnts crash like ocean waves. Knowing this simple difference a force can be placed back into gravity and magnetism can be fully explained. This is such a simple error it is hard to believe it ever happened.
I have elaborated on this fully at: https://synodicgravity.com/

Here is the reason why no one knows how the mechanism of magnetism works. It is because of the misconception in the double interference experiment and because water waves are used to describe light. IE waves bounce as shown in successive interference experiment and shown by the MIT interferometer experiment. There are several other proofs using radio and microwaves which are photons which proove light waves can collide under certain circumstances.
This is like entanglement which will be shown to be based on wave to wave collisions, not something mysterious as presently thought. The spin is altered. This will be explained the theory.

A very simple mistake led to a huge mess. These arguments went on for years all because light waves were compared to water waves. See example exerpt from Stanford. They got so twisted up in the phlosophy of math they overlooked the fact that water waves when moving crash into another first, then pass over and under another all while passing through another.
After that it appears as everyone else just carried on what they were tought. After wave to wave collisions is recognized this argument falls apart.

Look what happened. This argument happened because they thought light waves passed directly through another. Instead light waves are from mulit angle collisions, phase changes, and spin orentations which allow or not allow collisions.
Nikola Tesla, the father of modern electricity, and the inventor of the radio said;
"Today's scientists have substituted mathematics for experiments, and they wander off through equation after equation, and eventually build a structure which has no relation to reality".

See Stanford Encyclopedia of Philosophy:
Copenhagen Interpretation of Quantum Mechanics
https://plato.stanford.edu/entries/qm-copenhagen/
Read paragraph 4. Complementarity
"After Heisenberg had managed to formulate a consistent quantum mechanics in 1925, both he and Bohr began their struggle to find a coherent interpretation for the mathematical formalism. Heisenberg and Bohr followed somewhat different approaches. Where Heisenberg looked to the formalism and developed his famous uncertainty principle or indeterminacy relation, Bohr chose to analyze concrete experimental arrangements, especially the double-slit experiment. In a way Bohr merely regarded Heisenberg's relation as an expression of his general notion that understanding of atomic phenomena builds on complementary descriptions. At Como in 1927 he presented for the first time his ideas according to which certain different descriptions are said to be complementary.
Bohr pointed to two sets of descriptions which he took to be complementary. On the one hand, there are those that attribute either kinematic or dynamic properties to the atom; that is "space-time descriptions" are complementary to "claims of causality", where Bohr interpreted the causal claims in physics in terms of the conservation of energy and momentum. On the other hand there are those descriptions that ascribe either wave or particle properties to a single object. How these two kinds of complementary sets of descriptions are related is something Bohr never indicated (Murdoch 1987). Even among people, like Rosenfeld and Pais, who claimed to speak behalf of Bohr, there is no agreement. The fact is that the description of light as either particles or waves was already a classical dilemma, which not even Einstein's definition of a photon really solved since the momentum of the photon as a particle depends of the frequency of the light as a wave. Furthermore, Bohr eventually realized that the attribution of kinematic and dynamic properties to an object is complementary because the ascription of both these conjugate variables rests on mutually exclusive experiments. The attribution of particle and wave properties to an object may, however, occur in a single experiment; for instance, in the double-slit experiment where the interference pattern consists of single dots. So within less than ten years after his

Como lecture Bohr tacitly abandoned “wave-particle complementarity” in favor of the exclusivity of “kinematic-dynamic complementarity” (Held 1994).”

SUCESSIVE INTERFERENCE EXPERIMENT

This applies to the double slit experiment as well.
To my knowledge this experiment has not been executed before. See drawing.
Evidence of a position or spin phase change for both wave collision and individual photon phase change, and how EM waves can transfer a force. How wave interact and bounce apart. Causality: A type of force must be in present.
See Drawing.

Experiment Setup.

A green laser pointers beam is split by a .004-inch vertical wire as shown in drawing. This results in a commonly known pattern of light and dark fringes of light as shown as the first row. Note each fringe at this point is a solid bar of light. A barrier is then placed which allows only a single fringe to pass. The light from the single fringe is then split in half by a second vertical wire. This results in another set of fringes shown at the second row.

All looks normal until one looks closely at the fringes on the second row. Here we find within each fringe is another set of fringes. This is not possible when applying the current rules of superposition which were developed using water waves to describe superposition.

Unlike the first row of fringes which are solid light, for no apparent reason a third set of fringes appear within each fringe. Contrary and confusingly the internal fringes within each individual fringe appear without being split by a third wire. If the first row does not have internal fringes within each fringe why does the second row have them? If waves passed directly through another the second row also should also have solid fringes.

What could be causing the additional sets of internal fringes, since they have not been split by a wire. The only answer is light wave collisions. This is contrary to the rules of superposition. There also appears to be another set within each of the third set. It appears there is a fourth set also but I could not determine this with the green laser pointer I used.

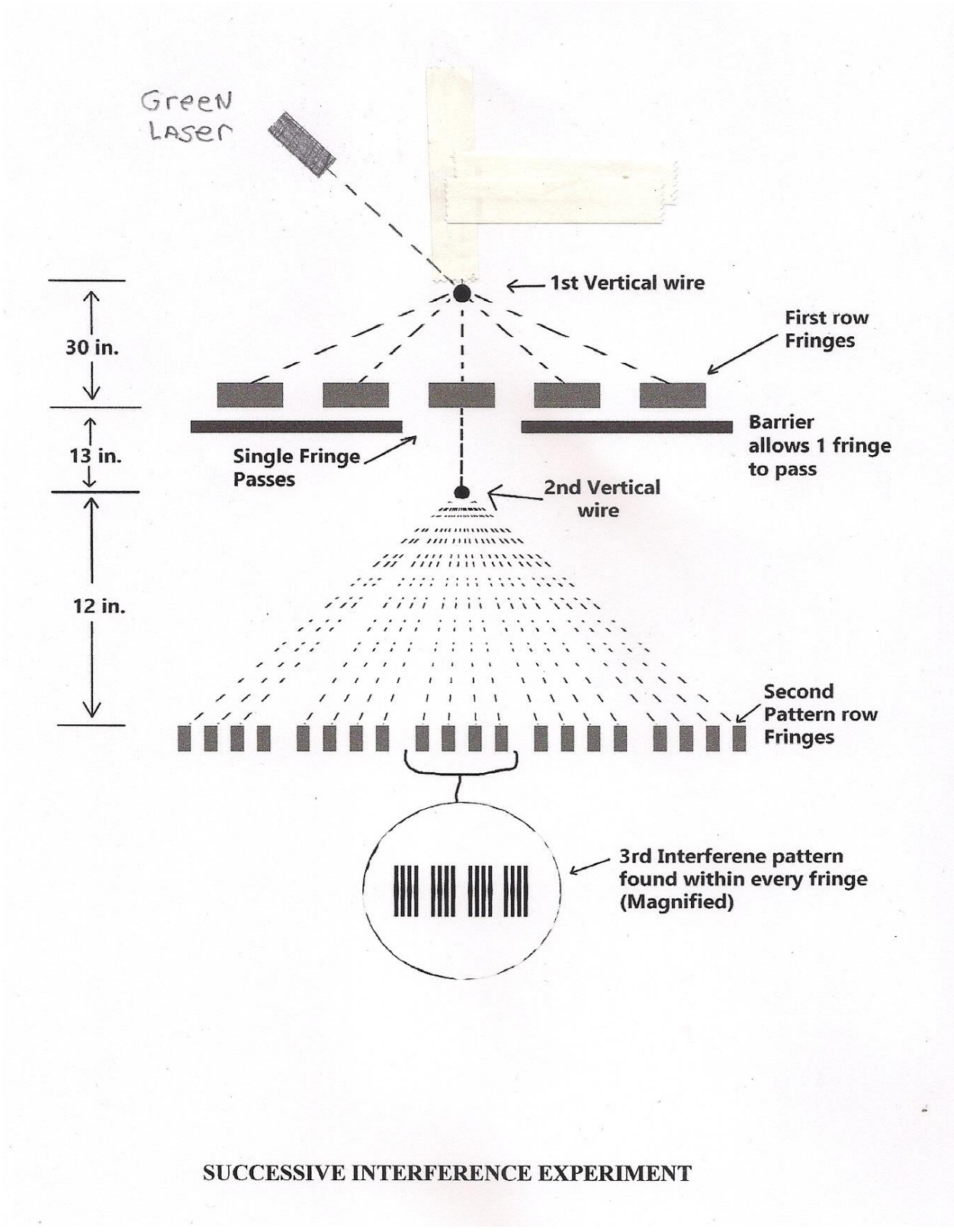
Question: If the interference is done twice what are the possible outcomes and why?

1 First pattern has no variation (has solid interference pattern).

2 Second pattern should have solid fringes within each fringe and should be filled in having no variations. However, this is not the case.

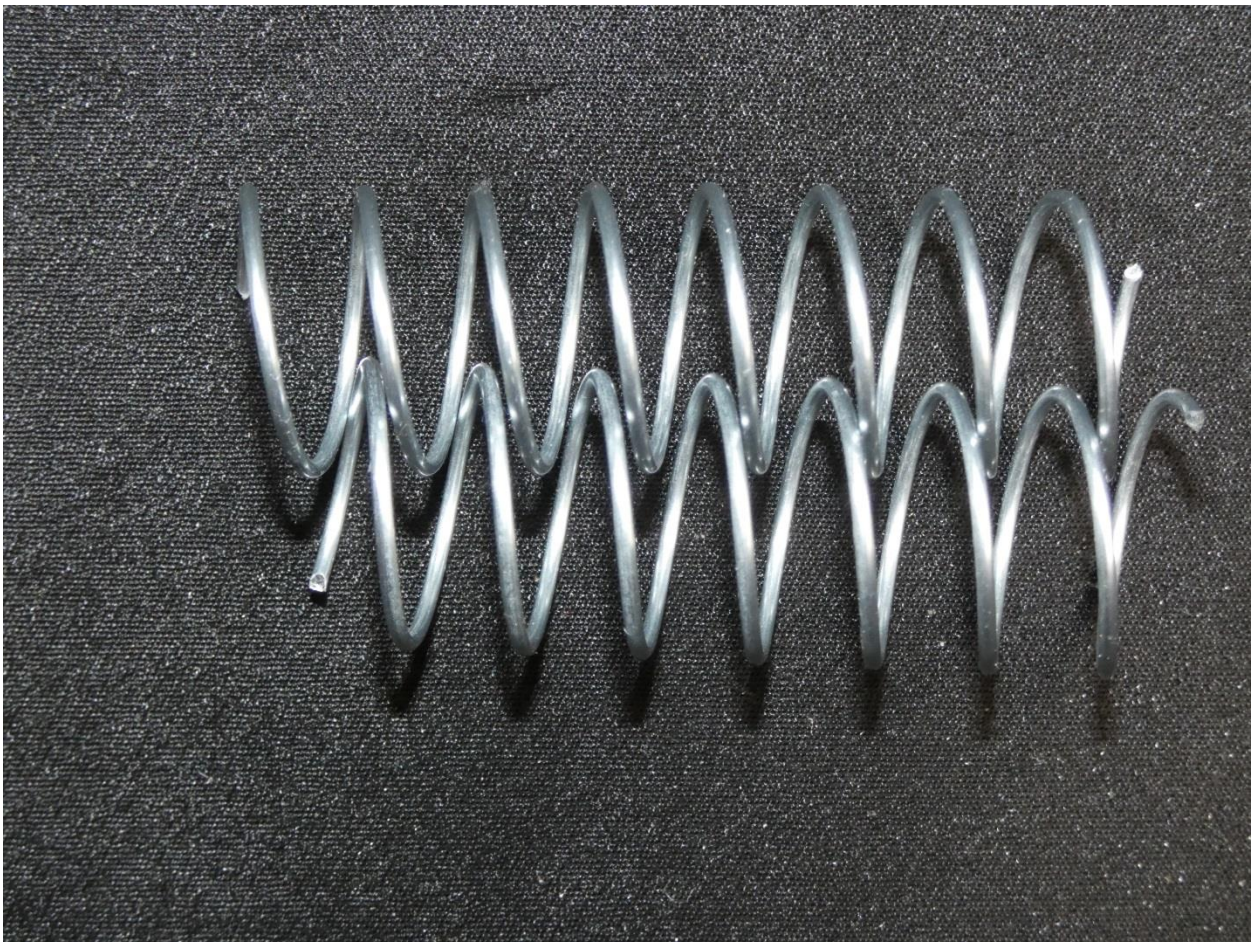
RESULTS:

The second and third patterns all have interference fringes within their fringes.



Successive Interference drawing.

If a red-light laser is used increase the distances, and use a >15 milli-watt laser. This should work with the double slit experiment also.



Springs represent rotating helix electromagetic wave.

Proof #2: Where Did the Light Go?
Required YouTube video Ref 1. **MIT demo w/2 beam splitters proves the two light beams collide and bounce back to the source. Professor Shaoul Ezekiel at MIT. OPTICS: Destructive interference "Where does the Light go?" Link:**
https://www.youtube.com/watch?v=RRi4dv9KgCg