

Investigation of Propagation of Compression Waves in Materials during Addition/ Removal of Force

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Opinion

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The speed of transfer of force information in materials was investigated. It was found that when the weight is added on the material, this information of addition of weight does propagate with speed of sound through compression waves. But when the weight was removed, some puzzling results were found.

CURRENTLY ACCEPTED PREMISES

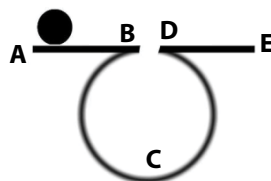


Figure 1. Simple device.

Figure 1 shows simple device used for this experiment. All device is made of same material. Plank AB and plank DE are for motion of ball. Gap BD is very small compared to circumference of the ball. Length BCD can be increased by replacing the coil with "springs-within-springs" structure. Plank DE can be held in hand or put on weighing machine or attached to one end of see-saw.

Premise-1: When ball is put on point B of plank AB, this information of addition of weight does propagate with speed of sound to point D of plank DE through path BCD of coil in time period x .

Premise-2: When the ball is removed from point B of plank AB, this information regarding removal of weight is transferred to point D in same manner i.e through path BCD in compression waves in same time period x .

Investigation

1. Rigorous Google, YouTube and online science libraries search was carried out to find the supporting experiment on which both premises are based. None was found. Personal inquiries were made with learned academicians and in internet discussion forums to find out whether any experiment is carried out in history to test both premises. None was able to point out any such experiment. So it is reasonable to think that academicians have arrived at both premises on "it is obvious" logic.
2. It was decided to test this "it is obvious" logic in scientific manner. If both premises are true, these premises won't contradict any Physics law. But if one or both premises are wrong, certainly the wrong premise(s) will contradict some Physics law.

3. Premise-1 was put under rigorous logic and thought experiments to find whether it contradicts law of conservation of energy. No such contradiction was found. So Premise-1 is true.
4. Premise-2 was put to test.
 - a. We remove ball from point B of plank AB. As per premise-2, this information of removal of weight of ball starts propagating across path BCD to point D. It takes time period of x to reach this information to point D. As per premise-2, during this time period x , point D will keep experiencing weight of ball even though ball doesn't exist on point B of plank AB.
 - b. Now this sub-section must be read very carefully with utmost concentration and calm mind.
5. During this time period of x , we put the same ball on point D. Point D will immediately experience weight of ball. But it must be remembered that during this time period of x , point D is experiencing weight of ball as if the ball is still on point B of plank AB. So point D will treat this ball - which we put on it during time period of x as second ball. Hence as per premise-2, during this time period of x , point D is experiencing weight of two balls. But in reality there is only one ball all the time.
6. It is not necessary to remove ball from point B of plank AB and put it on point D of plank DE by using our hand. We can set the ball in motion on plank AB. As per accepted premises as long as ball is moving only on plank AB, plank DE will not feel any increase or decrease of weight equal to weight of ball. But when the ball crosses very small gap BD, suddenly - as per accepted premises - point D will feel weight of 2 balls when in reality there is only one ball all the time.
7. If premise-2 is correct, then we can construct many experiments to create "free energy". For example, if plank DE is attached to one end of see-saw and if initially see-saw was balanced, then during this propagation delay of time period x , one end of see-saw will experience increased weight and hence other end of see-saw will go up. Thus we can lift weights without spending any energy.

CONCLUSION

It is unknown why academicians never performed any experiment to verify both premises, especially premise-2. If currently accepted premise-2 is true, then only unavoidable conclusion is that law of conservation of energy can be broken and "free energy" can be created. This author believes that it is impossible. All the academicians are requested to investigate why no experiment was performed to verify basic assumption on which most of the physics is based. They are also requested to investigate premise-2 applying this simple experiment.