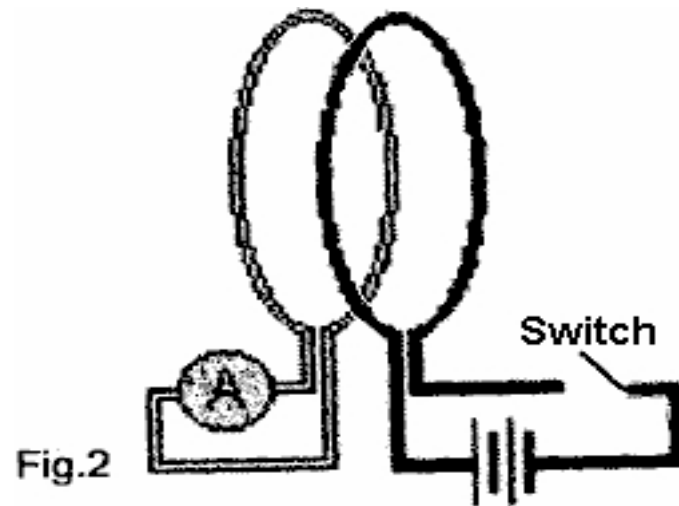
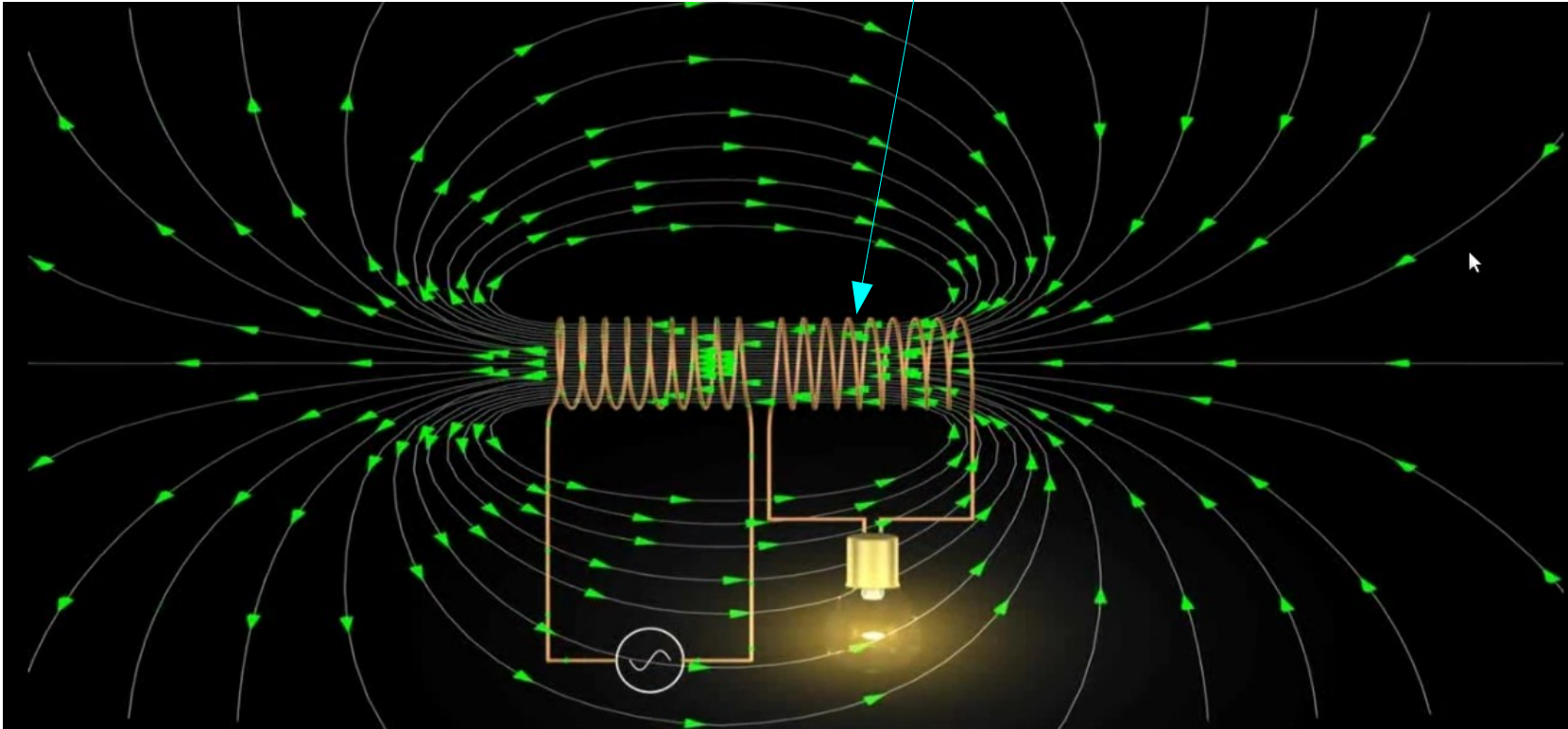




* In Barbosa and Leal document: (Lenz's law)

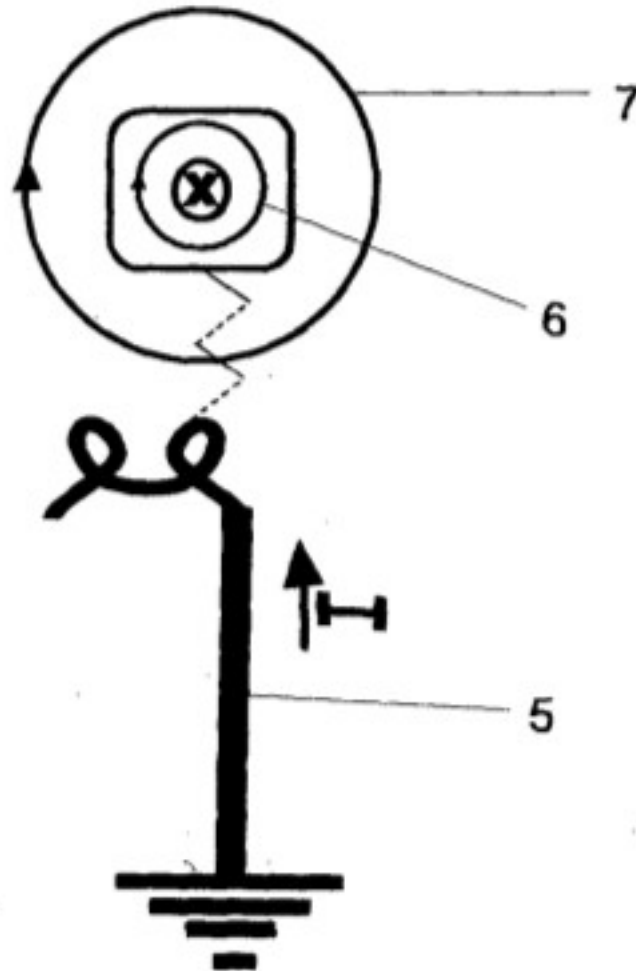
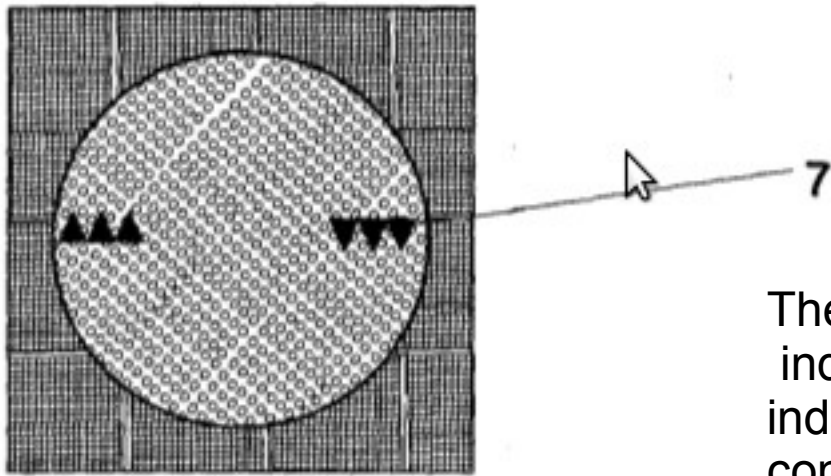
- When two electromagnetic coils are placed facing each other, as shown in Fig.2, there is no current in either of them. At the instant of power-up of one of the coils, the current in the coil, generates an induced current in the second coil. When powered up, the current in the coil goes from zero to its maximum value, and then remains constant.
- Thus, when the current is changing, the magnetic field generated by it, (whose north pole faces the second coil) is also changing and so the magnetic flux of this field through the second coil is also changing. Then there is a current induced in the second coil whose sense is such that the magnetic field it generates tends to decrease the flow mentioned above, that is, its north pole confronts the north pole of the first field coil.
- When the power switch is opened, the current in the first coil drops from its maximum value to zero, and correspondingly its magnetic field decreases. The flux of the magnetic field in the second coil also decreases, and the induced current now flows in the opposite direction. This current flow direction produces an enhancing magnetic field, that is, it has a south pole facing the north pole of the field of the first coil.

How to withdraw the energy in this second coil?

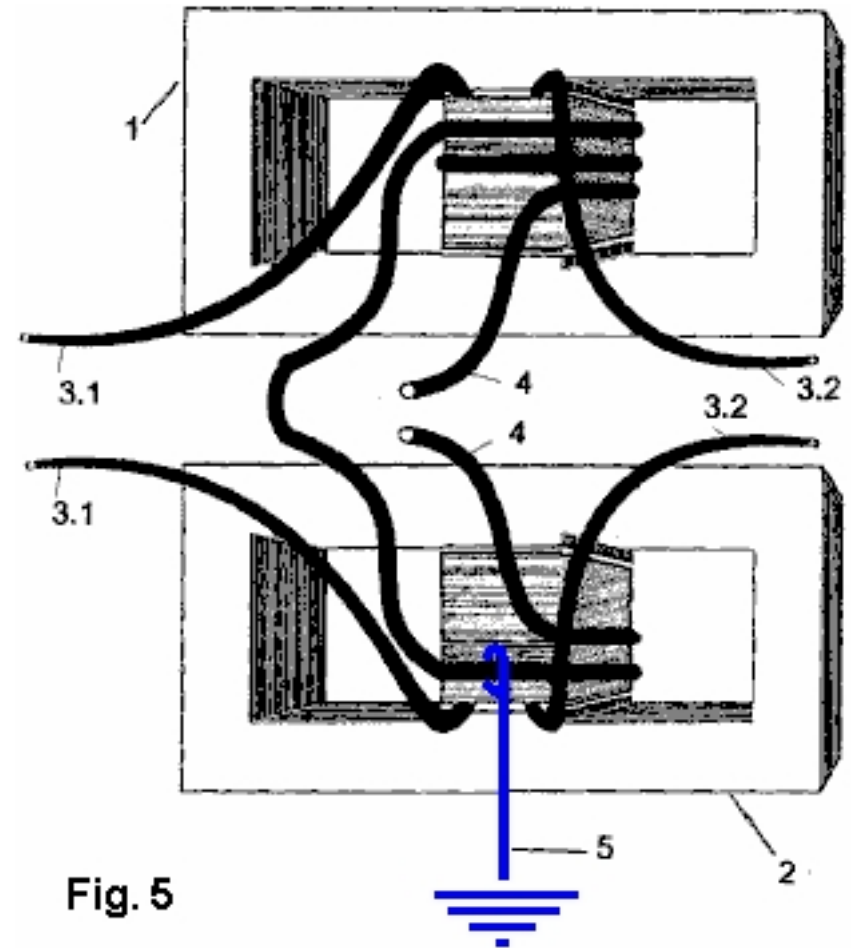
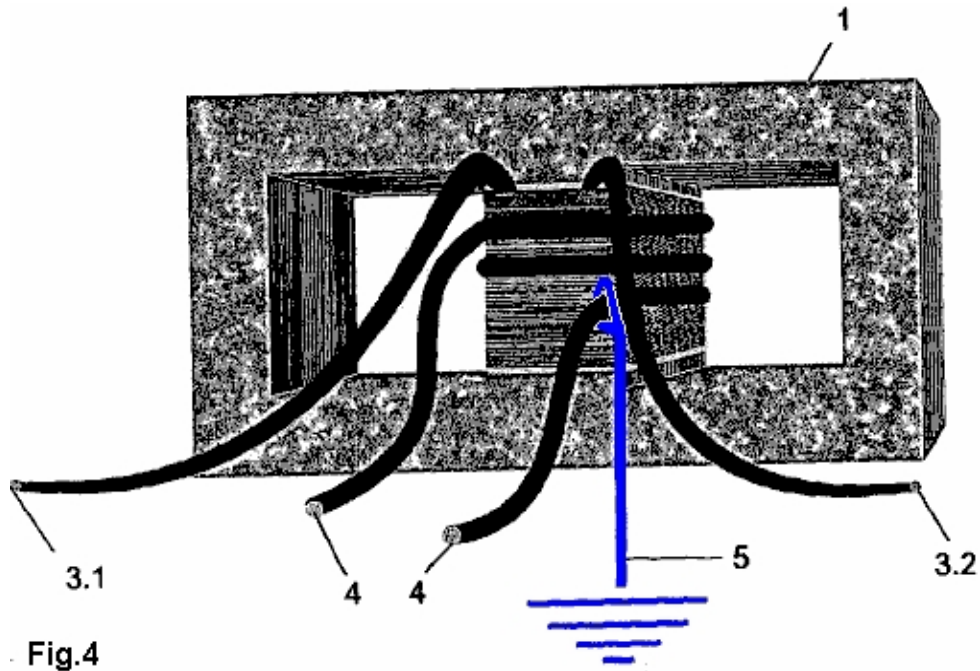


* In Barbosa and Leal document:

- If energy were to be withdrawn from the magnet-coil system at the same rate at which the kinetic energy of the magnet increases, then there would be an endless supply of energy. So it would be a perpetually operating motor, which would violate the principle of conservation of energy. Therefore, it can be concluded that current generators feature a large energy loss during the generation of electricity.

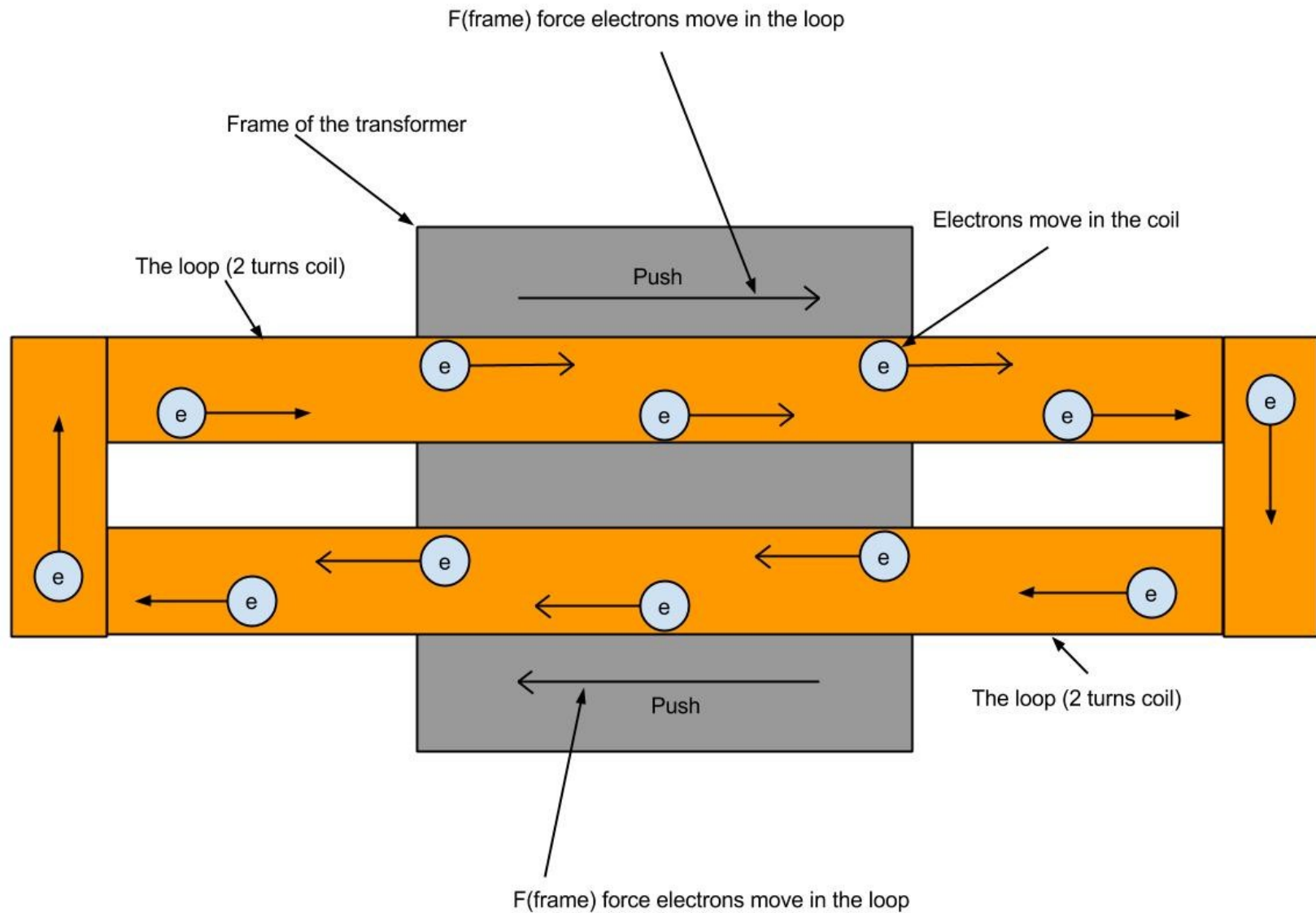


The diagram shown in Fig.6, illustrates the magnetic induction 6 around the core "X" of the coil 1. This induction causes electrical current flow in the conductor coil link 7/4, attracting electrons from the earth, through the conductive member 5, to the magnetic field of the electron-trap, where those electrons are added to the current generated by induction in the link coil 4 conductor loop circulating between north and south magnetic poles.



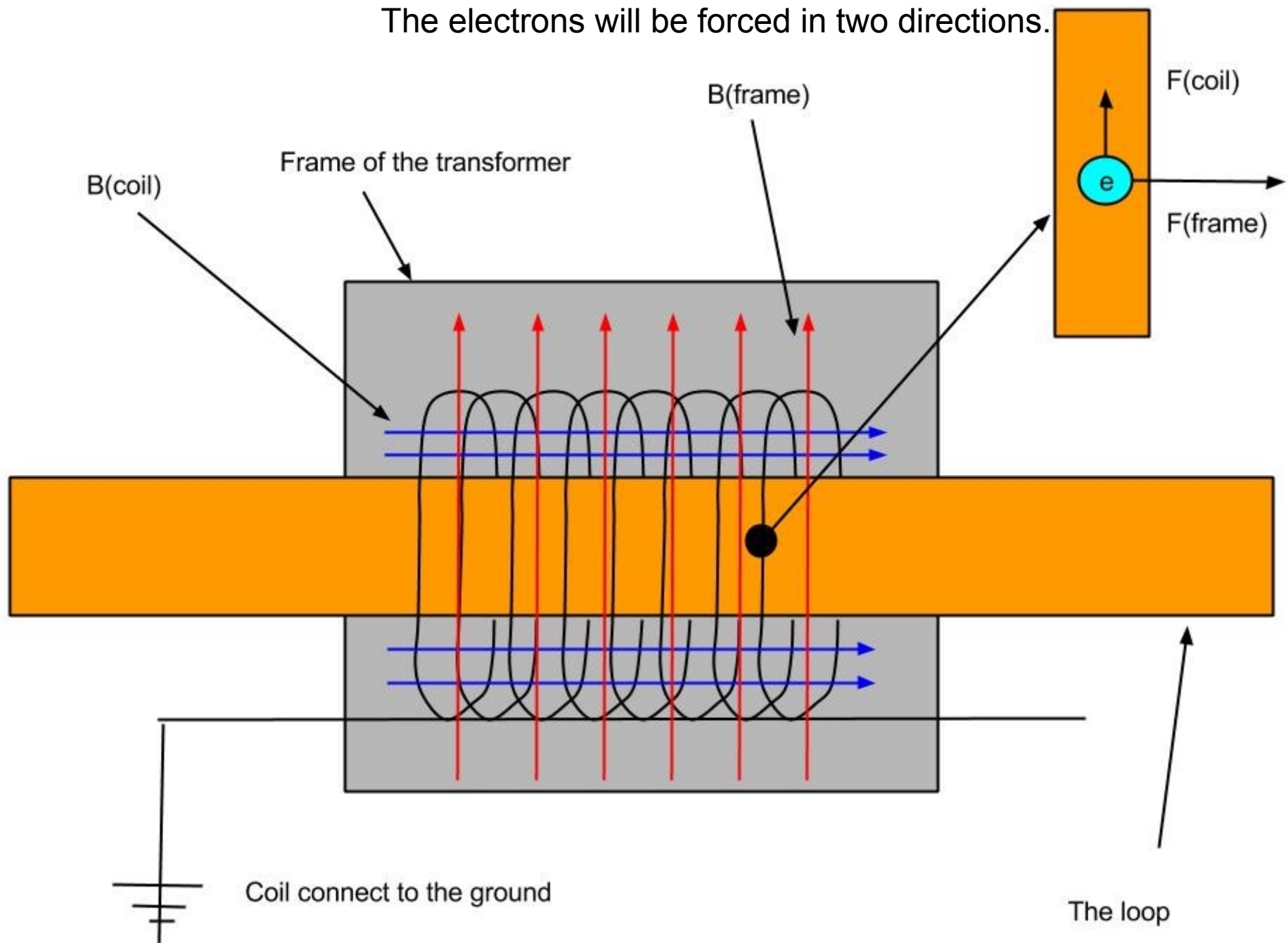
In these pictures, the earth connection is very close to the transformer or in the center of 2 turns coil.

So I have an idea.

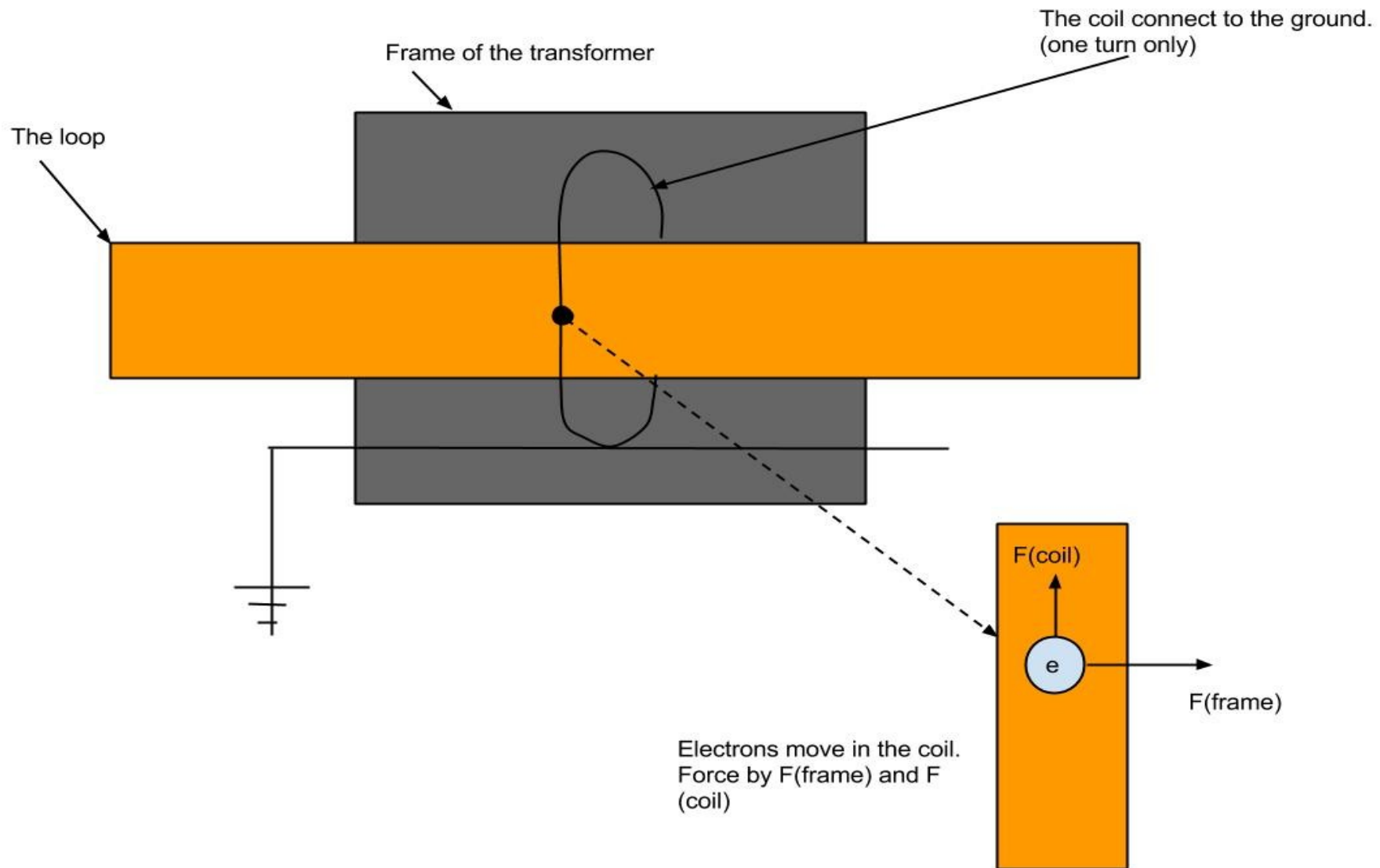


This picture show how the electrons move in the 2 turns coil.

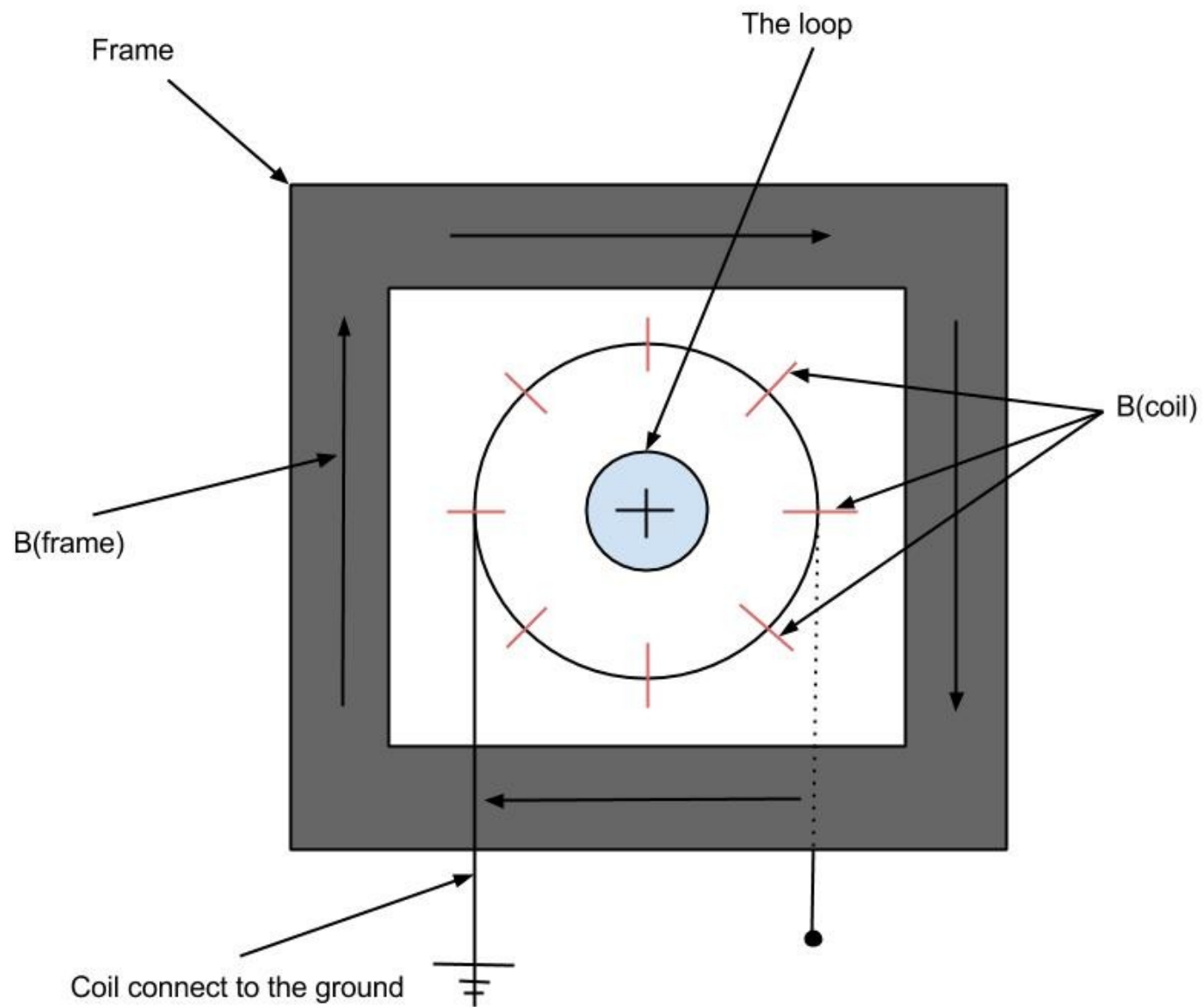
The electrons will be forced in two directions.



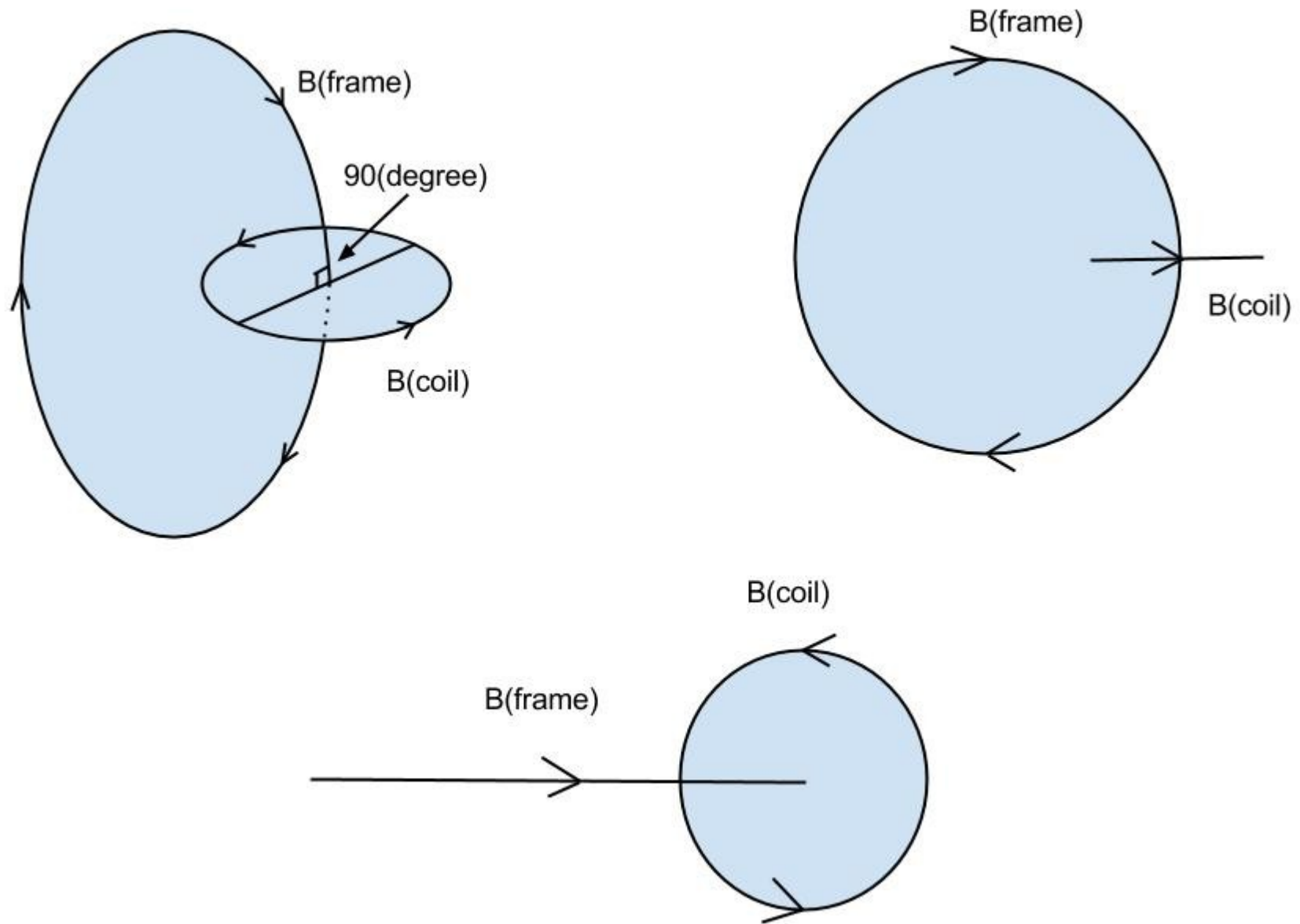
I think the best place to put the earth connection is in the frame of the transformer. Maybe, electrons in the ground will be forced to move to the loop?



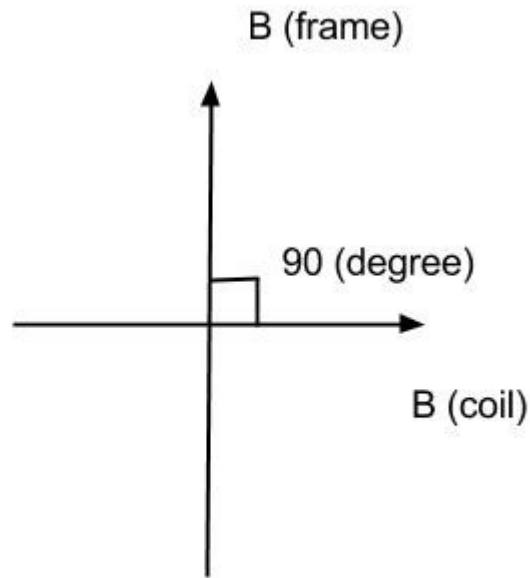
The electrons will be forced in two directions. But $F(\text{frame}) \gg F(\text{coil})$, so more turns in the coil (connect with the ground), electrons will move in longer distance, more easier to trap electrons.



Side view of the transformer.



$B(\text{frame})$ doesn't effect with $B(\text{coil})$.



B(frame) does not effect with B(coil).

Maybe, the current in the second coil will be withdrawn and move to the loop and create an enhanced magnetic field.

It is just my idea. Please make the experiment to test this case.
I don't know how many turn in the coil and how to turn it.