

## Claims

1 A shock wave converter for transforming dissipate shock wave energy in energy of rotation with tree mechanics components:

2 - a shock dynamic transformer with two variants and combinations between those two, a variant with proper amortize and second variant with dynamic stopper with a role to create a dynamic flux in a fluid, and it is a cylinder with a piston (like a classic engine piston) at one head and at second end of cylinder oriented via a tub connector to house of turbine, and function of intensity of shock wave, the piston should have an axle with two elastic springs (with the same elasticity) every spring guarded back of a regulator of initial tension. Any kind of wave shock can permit only the piston and the cylinder or the cylinder with elastic membrane..

3 - a turbine converter what to accumulate energy of rotation from dynamic flux create of shock dynamic transformer and what can have a diversity of geometric configurations function of intensity of wave shock.

4- a dynamic amortize-extinguish of negative harmonics produced, with a role of dynamic flux regulator and reactive answer to dynamic shock transformer actions, with a cylinder attached to turbine and communicating with the fluid turbine at one end and a piston guarded of a spring at second end what is close.

5 A electromagnetic vibrator engine said electromagnetic vibrator engine based on shock wave converter capacity of transforming a wave shock in rotational movement with a electromagnetic wave shock producer, a solenoid attached back or front of pistons of shock dynamic transformer wound around a cylindrical tube with a ferro-magnetic actuator or "plunger" intimately attached to piston what to push periodically the shock dynamic transformer under actions of a pulse magnetic field created of solenoid connected to a pulse width modulation current generator from a battery or another current sources.

. 6 A M Thermodynamic resonant engine variant, with a improve on power characteristics (improve effective power extraction) using instead of cylinders and pistons of over compression the shock wave convertor with the cylinders conducts oriented to a turbine with the common shaft with engine shaft.

Shock wave converter for a electromagnetic vibrant engine, for a M Thermodynamic resonant engine and for dissipate shock wave sources.

#### Cross Reference to Related Applications

Not applicable.

#### Background of the Invention

This application is a method to achieve energy from dissipate shock wave sources like a absolute rotary engine or tidal wave.

#### Drawings Description

Fig. 1- present a section transversely in a complete shock wave converter with the specifications, the numbers of shock dynamic transformers can be more or less and the shock dynamic transformers can be oriented to shock wave sources via the tubes connectors function of shock wave placement and with next components:

- 1 dynamic shock wave transformer
- 2 tube connector of dynamic shock wave to turbine
- 3 turbine
- 4 rotor-turbine
- 5 dynamic amortize-extinguish of negative harmonics
- 6 rotor-turbine shaft

Fig. 2. a section transversely in a shock dynamic transformer with proper amortize with next components:

- 1 the piston a classic reciprocating piston
- 2 prime spring
- 3 piston rod
- 4 prime spring tension regulator- a cylindrical form screwed up on piston rod
- 5 second spring
- 6 second spring regulator - a cylindrical form screwed up on house cylinder
- 7 house cylinder.

Fig. 3. a section transversely in a shock dynamic transformer without proper amortize but with a dynamic stop with mention dynamic stop can not be and then remain only the cylinder and the piston.

Fig.. 4- a combination of dynamic shock wave transformer

Fig. 5 a section transversely in a turbine of shock wave converter

1 the tube connector, what can have a shape to conduct dynamic shock wave transformer to shock wave source.

2 turbine house

3 turbine

4 turbine shaft

Fig 6 the turbine front cap with any dynamic shock amortize-extinguish attached.

Fig. 7 a section transversely of dynamic shock wave amortize-extinguish

1 cylinder with a end open to turbine house and opposed end closed

2 piston

3 spring

Fig. 8 a section transversely in a dynamic shock wave converter connected to a shock wave simulator(a relay switch)

1 coil

2 plunger

Fig. 9 a connection of a shock wave transformer with it's shock wave producer to turbine via tube connector

Fig. 10 a section transversely of a electromagnetic vibrator engine.

## Detailed Description

A totally rotary (absolutely rotary) engine present two problems

- 1- Achieving compression between two cylindrical symmetric surfaces.
- 2- transforming positively the detention energy in energy of rotation

For achieving compression a solution can be a double way turbo fan in the front doubled of a double way turbo charger in the back. Solution presented in the application M Thermodynamic resonant engine.

For second problem one of solution is presented here with specifications: can to have a lot of more utility and was achieved from the work for a totally rotary engine and it-s a shock wave converter what to transform the shock wave in a dynamic longitudinal pulse in a mass of fluid what to create a dynamic rotate flux in an transmission fluid to a driving gear what is a turbine.

It need tree mechanical components: a shock-dynamic transformer, a turbine converter and dynamic amortize and extinction of negative harmonics of wave shocks

Shock-dynamic transformer components convert the energy of a shock wave in a mechanical dynamic longitudinal movement of piston what will transfer it to a fluid (increasing the pressure in fluid the dynamic amortize will react elastic creating a dynamic flux in fluid). The dynamic flux will act over turbine rotor converter pushing it in a rotational movement.

The shock dynamic transformer, function of shock wave intensity and duration of pulse of shock wave, can have more type, begin with a elastic membrane or only with a cylinder and a piston to a complex shock wave converter presented here in tree forms one with a proper amortize and second with a stopper and one a combination between those two and their usage depend of shock wave characteristics.

The shock dynamic transformer with proper amortize (Fig. 2 ) is a cylinder(Fig. 2-7) with a reciprocating piston (Fig. 2-2 identically with every classic piston engine, differing dimensional only) in the front , the piston having the front face oriented to shock wave source and to the back face intimately connected to a cylindrical rod (Fig. 2, 3), over the rod and inside of house cylinder a first spring(Fig. 2, 2) followed of a spring regulator(Fig. 2, 4 like a interior screw) for elastic characteristics of first spring regulator, followed of second spring(Fig. 2, 5) and it's elastic characteristics of second spring regulator(Fig 2, 6 , a interior screw).

The next face of cylinder will be intimately connected to turbine and the volume interior full with fluid(transmission fluid). The shock wave will push the piston what will move a

mass of fluid in a short interval creating a flux directed to turbine what will activate the turbine in a rotating movement.

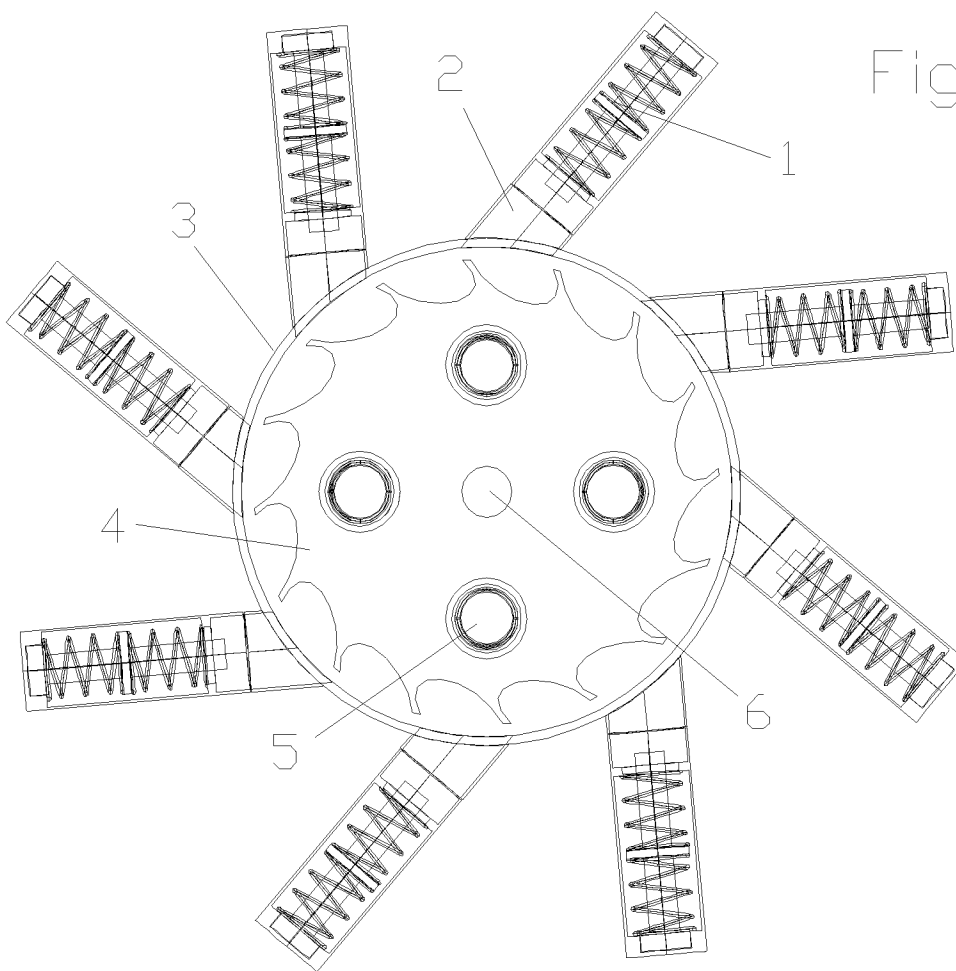
The position of connect to turbine is relatively to the shape of rotary turbine and what result is waiting from, for example can be based on a continue dynamic flux in fluid or only on impact of dynamic flux.

The turbine converter(Fig. 5) have role to transform the dynamic flux from the fluid in a energy of rotation and isn't different of a classics turbines accepting every kind of rotor turbine, but for ours scope I chose a rotor turbine(Fig. 5-3) what to assure a relatively big moment of rotation. The components of turbine are: a cylindrical turbine house(Fig. 5,2), a numbers of connectors for shock dynamic transformers(Fig. 5,1), a rotary turbine(Fig. 5,3) intimately connected with to a shaft(Fig. 5.4) and fully filed with transmissions fluid and one laterally face a cap(Fig. 6.1) with a numbers of dynamic amortize and extinction of negative harmonics of wave shocks(Fig 6.2). The role of dynamic amortize is to react at shock dynamic transformer creating a dynamic space for flux. The connectors for shock dynamic transformers are tubes what can be curved and shaped to conduct the opposed face of shock dynamic transformers to shock wave producers what can be a explosion chamber or a shock wave simulator like a electromagnetic rely.

This property offer a possibility to connect a shock wave converter to a M thermodynamic resonant engine creating a varian t, where the dynamic shock transformers will take the place of over compression pistons and shock wave converter turbine shaft will do common corpse with engine shaft.

Also, this property offer a large possibility for a new kind of electromagnetic engine with a big rate of efficiency. This electromagnetic pulse engine(Fig. 10) is based on shock wave converter combined with a electromagnetic shock wave simulator what is a relay switch accommodate to is role here and what is connected to a pulse width modulation current generator from a battery or another current sources. The intensity of electric pulse and is duration can be under control of a computer. The shock wave transformer coupled with this kind of shock wave are connected to the turbine converter . The number can is a function of the power need and of the RPM needed and those can work in a synchrony or asynchrony or in a group of 2, 3, .. , this allow to save energy and to not accumulate over hit in system.

Fig. 1



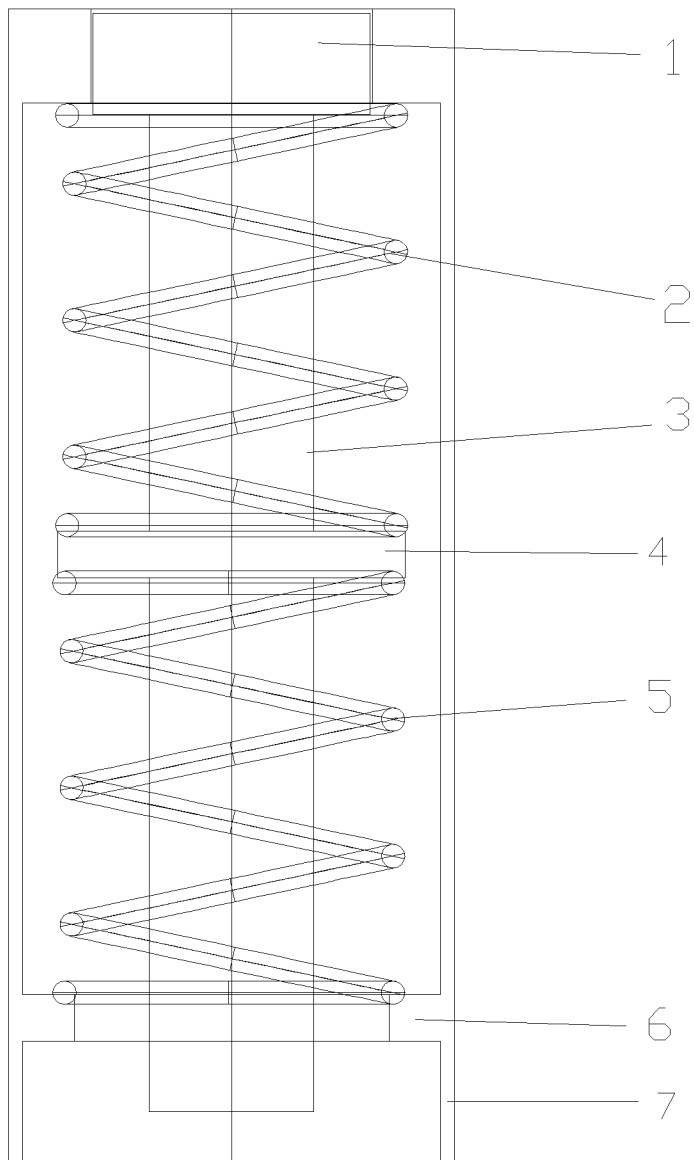


Fig. 2

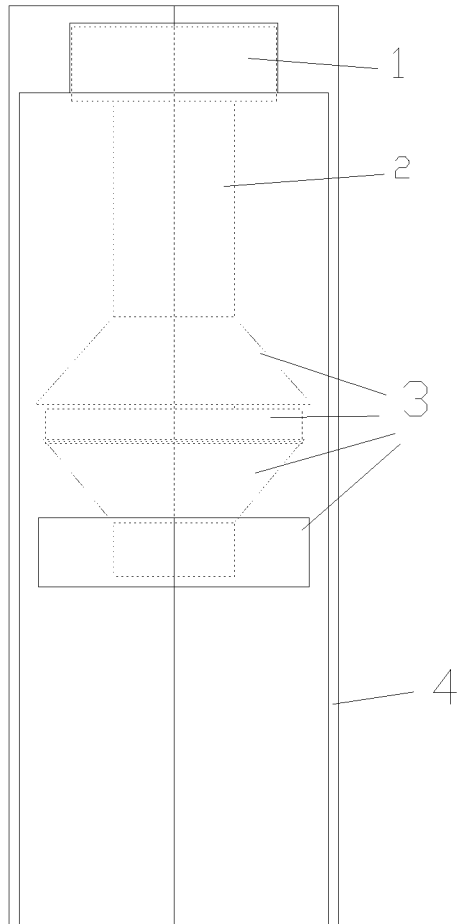


Fig. 3



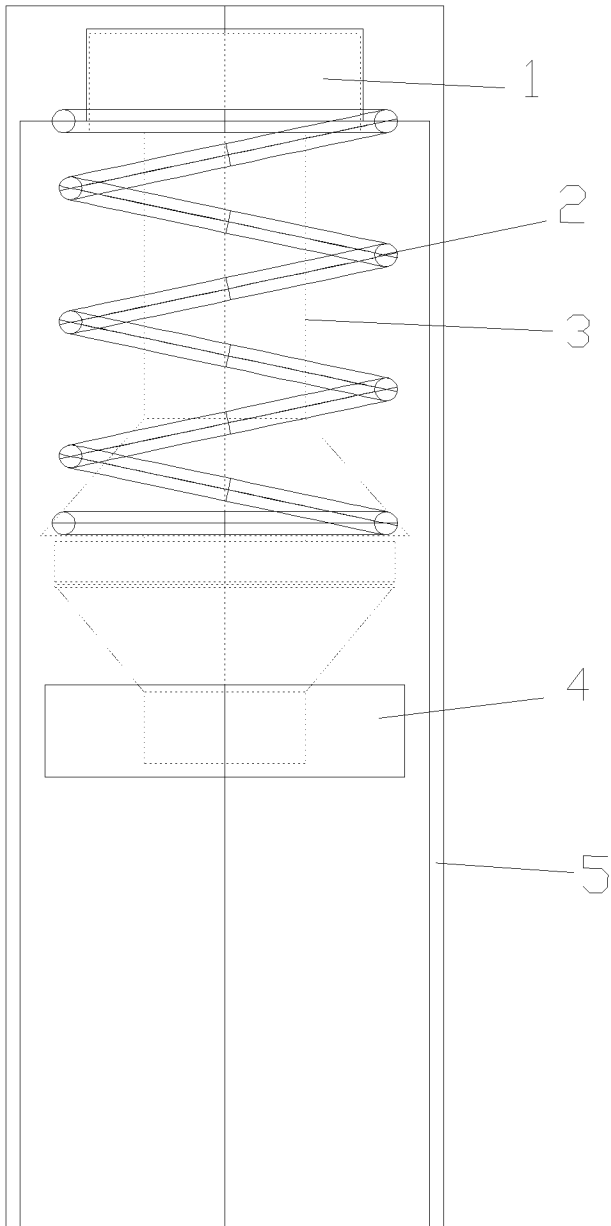


Fig. 4

Fig. 5

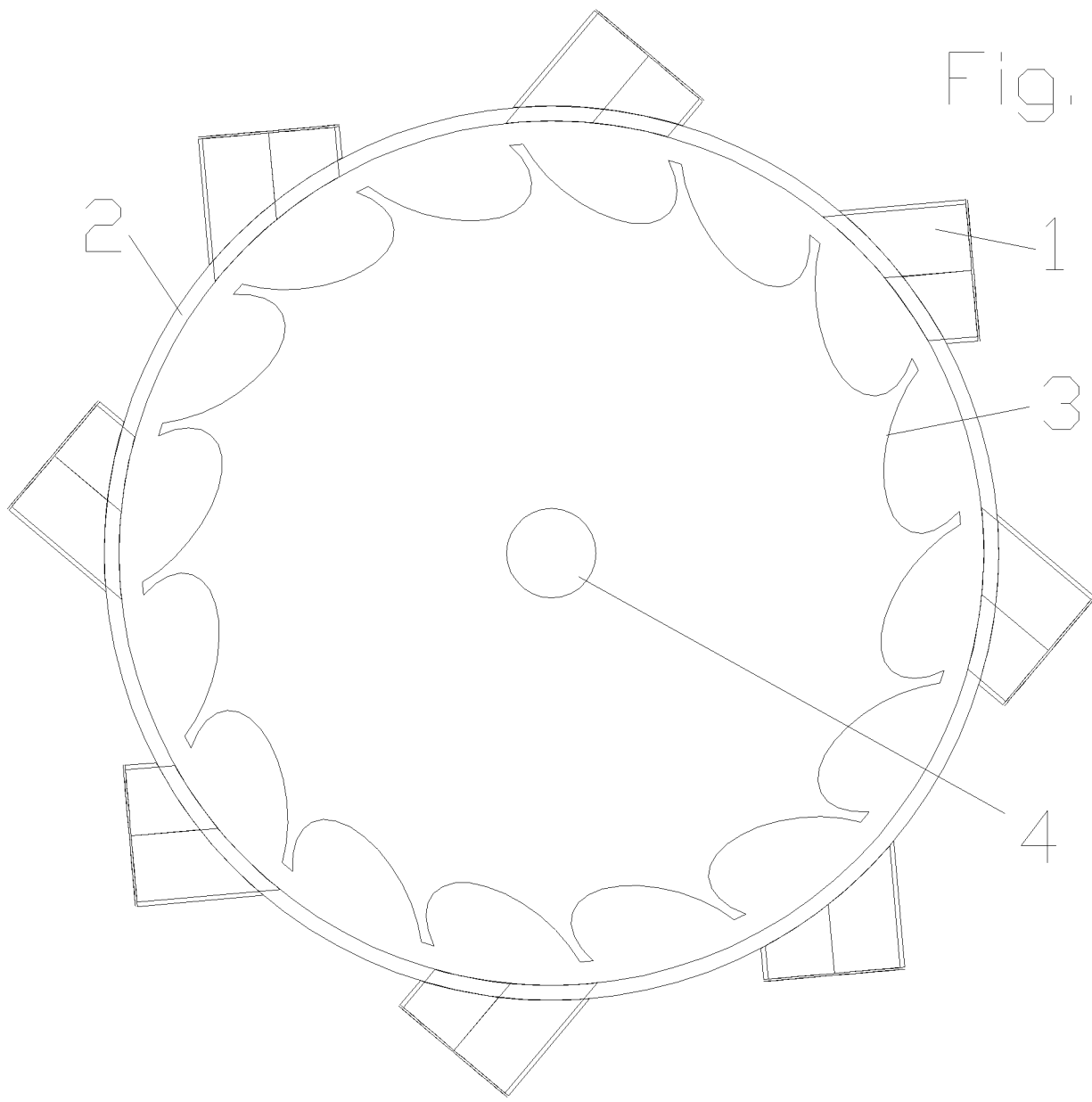


Fig. 6

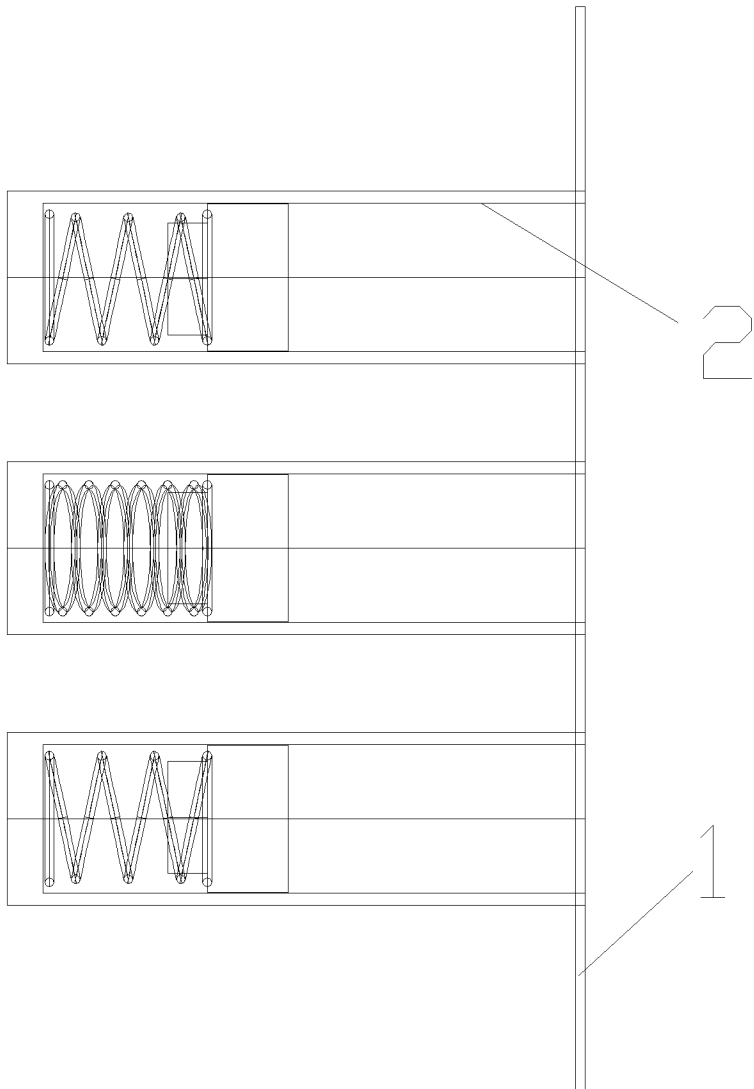


Fig. 7

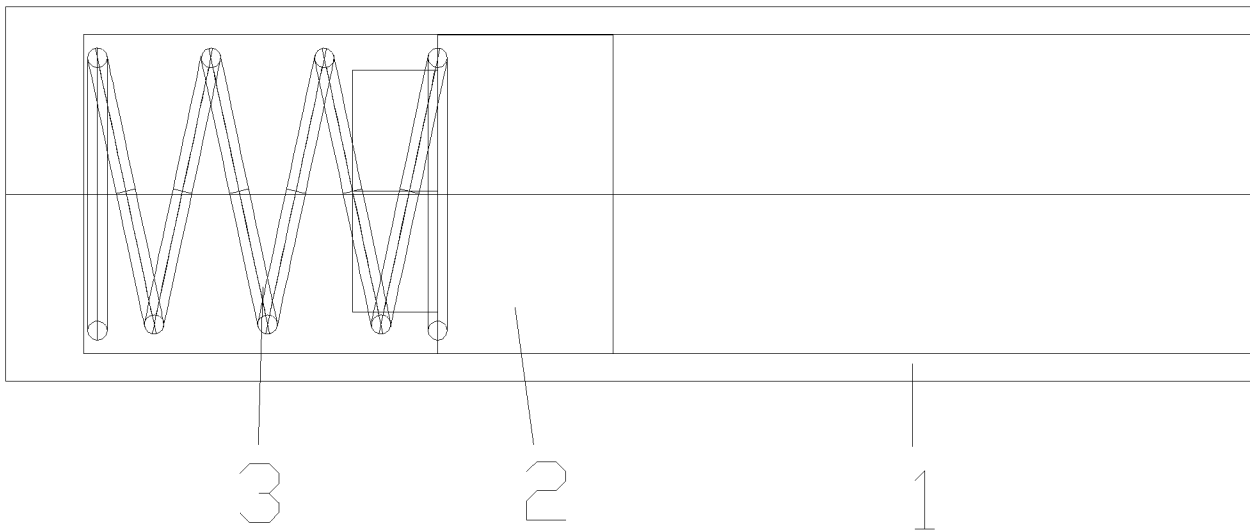
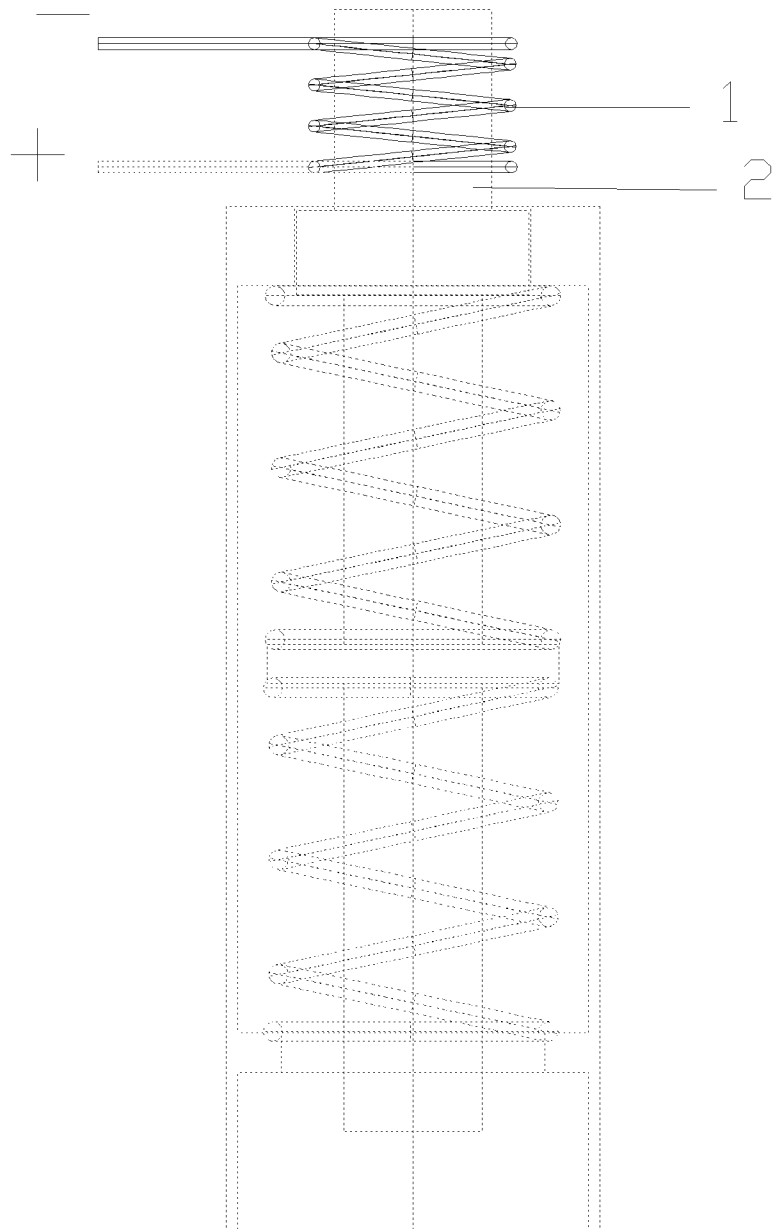


Fig. 8



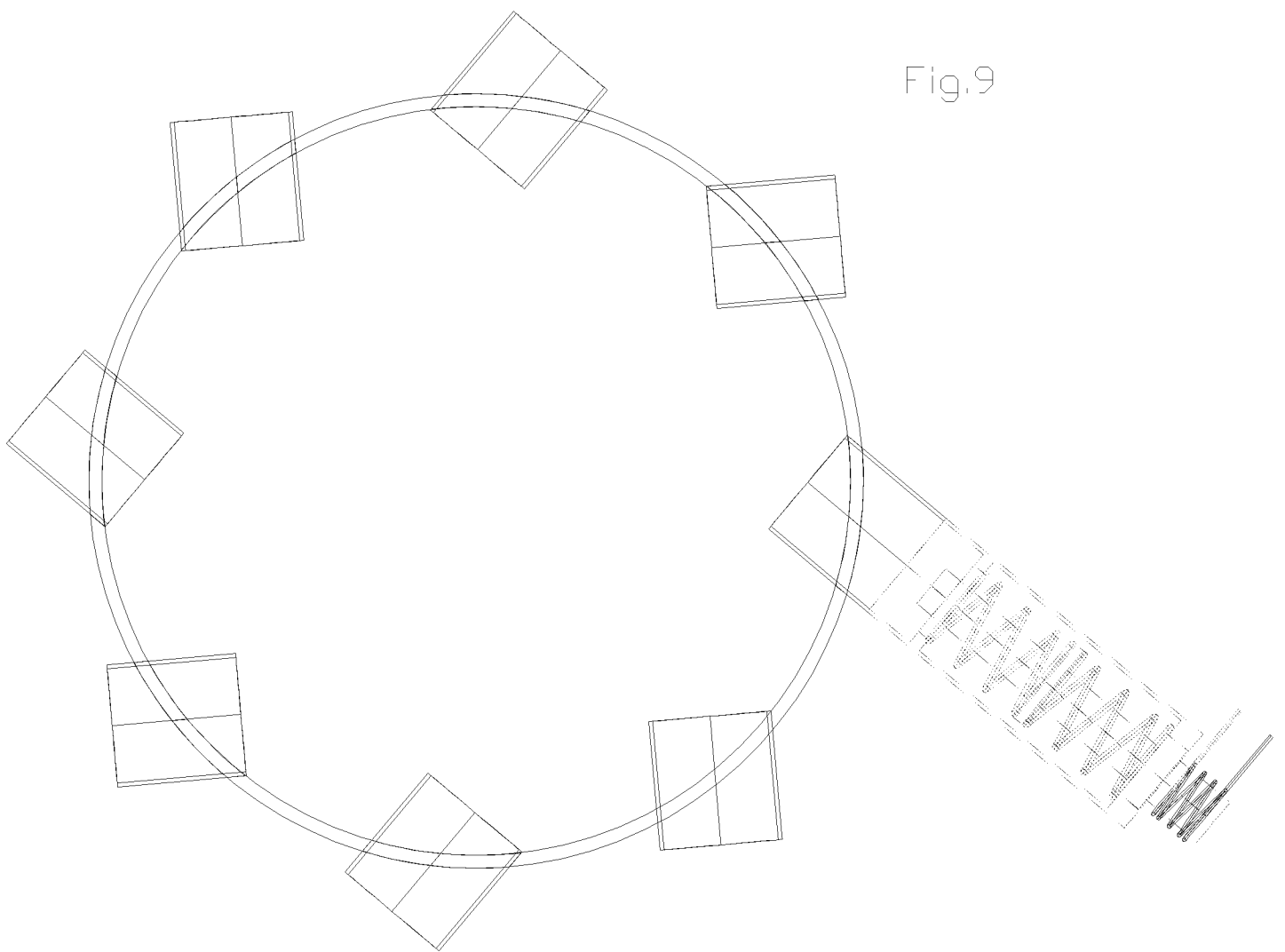


Fig.9

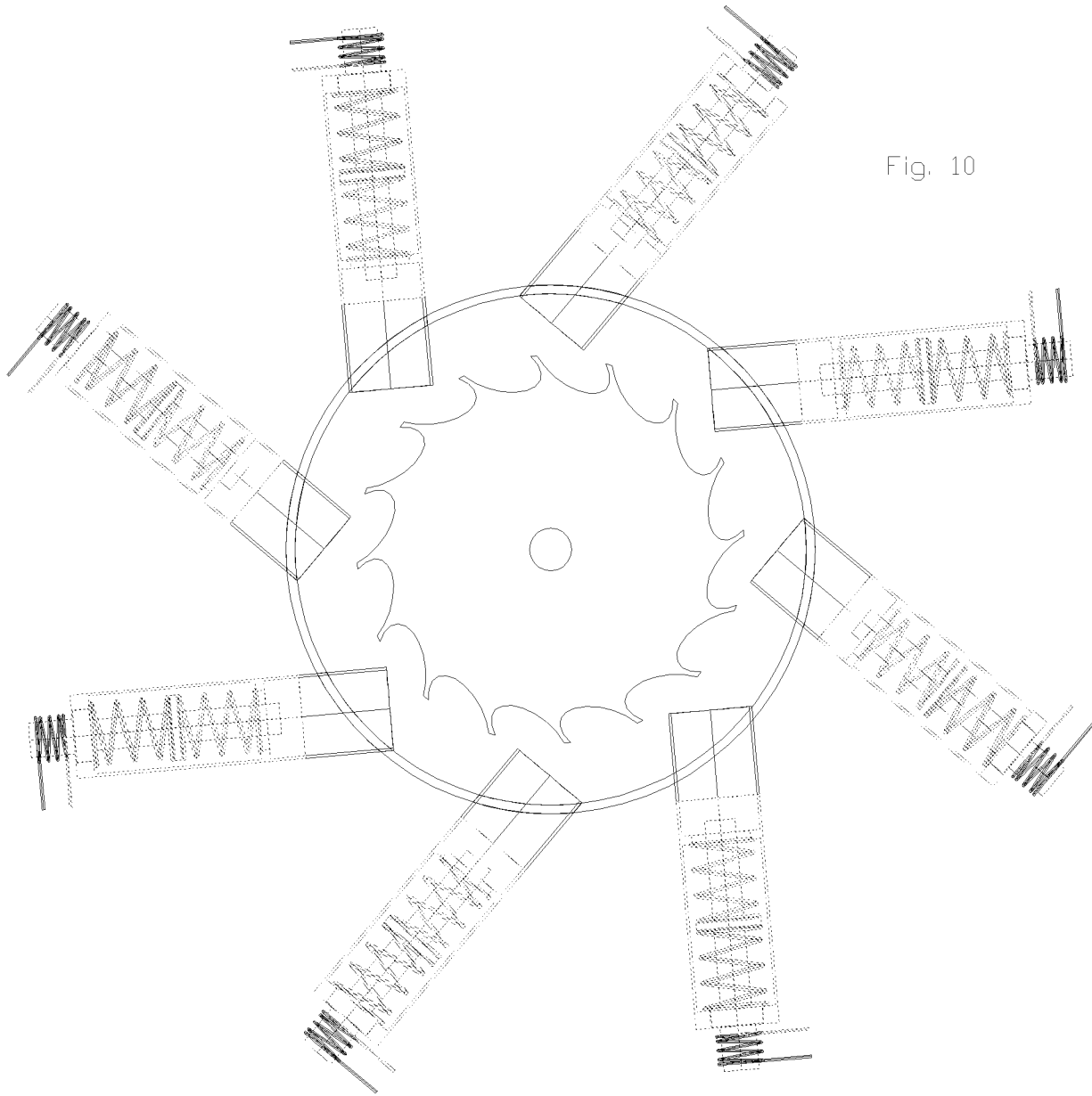


Fig. 10

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