LOUIS ROTA

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Main Page

This site has been attacked several times by some annoying (to be polite) spammers - To edit, you must now request an account by sending an email to the webmaster (see the Register Page). Sorry for the inconvenience

Welcome to Wikirota !

This site is dedicated to the work of Louis Rota (1886-1951) a pioneer in the development of the radar who devoted his life to the study of energy fields which he named "The Universal Currents". He built intriguing apparatus and developed his own code to reference these currents. Louis Rota was very secretive about his work and published very little. When he died, a great deal, but not all of his knowledge was lost. Here is a resume of what has been found from his notes, some of which is quite far reaching.

Did Rota make a fundamental discovery? Can we reproduce his experiments? Can we crack the Rota's code? This Wiki aims not only to open a debate for answering objectively to these questions, but to also to collect new clues that could help to decipher the Rota's Code.

Louis Rota Time Line **–*Questions/Answers***

The Work of Louis Rota

The Areo Radoa Balistique
The U.D.D.F
Medical Applications

These pictures illustrate three major aspects of Louis Rota Researches. One year after the construction of his "Aero Radio Balistique", Louis Rota became the first foreigner to be accepted in the very secret English Army team working on the creation of mine detector and the early Radar. Six years later, he returns in France convinced that he has discovered something more fundamental than some electro-magnetic telluric currents. He designed then his Universal Current Disturbance Direction Finder to study these currents. This machine was the center of a huge aerial and underground antenna . He extended also his investigation to theMedical Applications medical realm.

Discover the amazing Work of Louis Rota, an introduction to Louis Rota's world by Mike Watson

The Rota's effect

Rota did not use any electronic equipment, only a stop watch and a height impedance headset connected to a ground or/and aerial antenna network.

What we call the Rota's effect is not the well known background noise, neither the usual clicks produced when connecting / disconnecting the headset to an antenna: it is the fact that under certain conditions, the clicks occur when they should not.

Check by yourself !

- Discovering the Rota Effect
- Recording the Rota Effect
- A neon detector

The Universal Currents

Iron Zinc Copper Silver Carbon

LGV Rota claimed that the atmospherics or statics in radio sets was due to the metals of the radio set and antennae responding to the "Universal Currents". Using a tape recorder and an oscilloscope, Mike Watson was able to compare the effects of the atmospheric electromagnetic signals on several metals. Are these variations nothing but random phenomena totally explicable with physical properties of the metal?

- Nature and detection of the Universal Currents
- Is this cow-like signal and goose-like signal a Universal Current?
- atmospherics effect on various metals

The Passive Radar

The detectors built by LGV Rota could be classified as “passive Radar” because they were able to detect object without sending any signal. But Rota is not the only one to have worked on such concept. In 1939, a passive aircraft detector built by two scientists, J.Cecil Maby and T. Bedford Franklin, was tested with some success by the British Government. These two scientists published their work and their experiments are fully documented. Can this throw light on some Rota’s claims? Discover the remarkable research work of Cecil Maby and Bedford Franklin

The debate - A Researcher Misleading or Inspired?

LGV Rota was apparently a respected scientific advisor (Rota and the Death Penalty). The theory of Universal Current is apparently original, but we don't know how LGV Rota managed to build this new concept. LGV Rota did avoid telling too much, more exactly to tell much useful hints. Nevertheless he received support from both English and French governments and refused in 1940 a German offer. Can he really fool everybody for so many years? We have very few documents related to the military work of Louis Rota. ***If you have access to military archives, please contact us and join the investigation team!***

LGV Rota's Theories

- All matter is formed from universal currents.
- Each universal currents has its own specific properties, Rota had detected **361 different currents** by the time of his death in 1951.
- Every chemical element is constituted of a different group of universal currents, copper, for example, is formed from four such universal currents.
- If an element is exposed to one of its constituent currents the element disintegrates, not explosively but gradually or more rapidly depending on the strength of the universal current.
- The constituent currents are held together by a "force of cohesion" which is related to gravitation but unlike gravity, has polarity.
- The huge polar force of cohesion is released when an element is dissolved by a constituent current and can attract or repel ordinary gravitation.
- Electromagnetism is formed of five universal currents held together by the force of cohesion, three for magnetism and two for electrostatic forces.
- Electromagnetic polarity arises from the polarity of the force of cohesion.
- Electromagnetism can be split into its universal current components releasing the force of cohesion.
- The properties of the universal current are heavily involved in the life process. The life process splits matter into its universal current components.
- Common physical instruments usually cannot detect the universal currents directly, only components bound by the force of cohesion e.g. magnetism, electricity and momentum are detected.

Is the Rota Effect related to other theories?

- **The Zenneck surface wave**
- **SCALAR Waves and Tesla Shields**

Along with others, around 1906 J. Zenneck was attempting to explain how radio transmission could curve around the earth as was shown by Marconi's early radio transmissions across the Atlantic. Various theories where around at the time one of which was Zenneck's surface wave. The Zenneck surface wave is an electromagnetic wave which is conducted in the earth and along the earth-air boundary. It is not the same as the common radio frequency ground wave produced by the usual antenna configurations... (More..)

- **Maxwell's equations and Universal Currents**

The Maxwell's equations lead to the prediction of electromagnetic waves in a vacuum, which are transverse (in that the electric fields and magnetic fields vary perpendicularly to the direction of propagation)However, in a plasma or a confined space, there can exist waves which are either longitudinal or transverse, or a mixture of both. Rota' universal current propagates in a conductive medium such as salt water and the earth which for these purposes is a plasma. For this reason the universal current is most likely a largely magnetic longitudinal wave which can only exist in water or the earth. This would also explain how Rota's patented "Means of detecting Explosive Mines…" (LGV Rota Patents) in which the field produced by a paramagnetic body entering the field of a telluric current produces a shock or turbulence detectable by his apparatus. It would seem reasonable to assume that a ship, interacting with the very low frequency

mostly magnetic telluric current field, would have circulating currents induced in its hull and these would be detectable at a distance with a compass needle.

- ELF(Extremely Low Frequency) and Ground Radio
- Radio Waves Below 22 kHz
- Large Induction Coil for ULF Monitoring (DIY, schematic)

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The Universal Currents

- 1 A certain telluric currents ?
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- 3 Conclusions so far

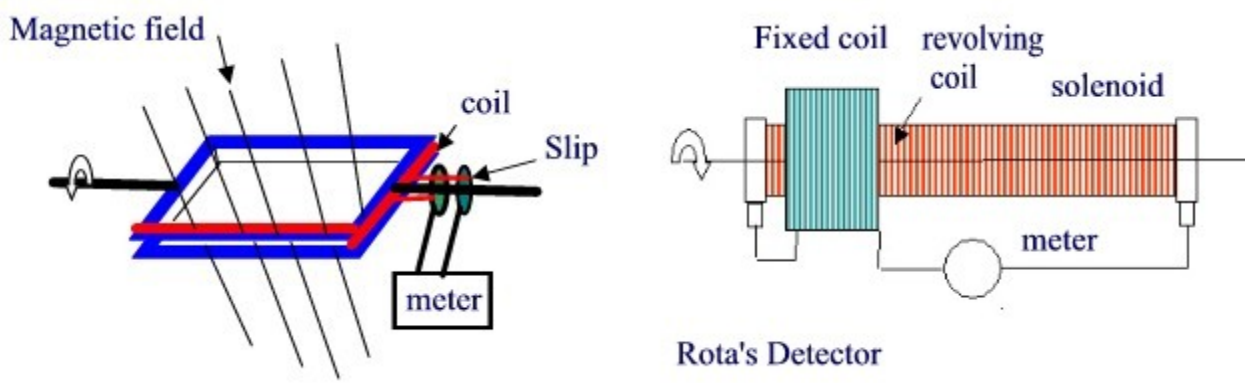
A certain telluric currents?

The UK and French patents quote above “Improved means of signaling the presence of mines”.

"I have discovered that there are certain telluric currents or earth currents which produce in the earth telluric magnetic vortices. The presence of intensity of these currents is shown when they encounter a magnetic or paramagnetic body however small it may be. Due to this fact it is possible to recognize the presence of a mine, submarine, ship or other magnetic or paramagnetic body”.

A good starting point is the common telluric current known to physics. Even today there are many features of it which are poorly understood. One source of the telluric current is thought to be due to movement of large quantities of salt water as happens in ocean currents moving across the geomagnetic field of the earth. Another source is from solar storms causing fluctuations in the earth’s magnetic field which in turn induce electric currents to flow in the earth’s surface. Lord Kelvin, 90 years ago, suggested that rotation of the earth in its non-uniform magnetic field as the possible source of earth currents. According to the Rota’s notes he originally thought telluric currents were produced internally within the earth itself. The magnetic fields these telluric currents produce mix with the common north-south field producing a complex field pattern.

There is another possibility: is the magnetic field of the earth fixed in space or does it revolve with the earth? It is not possible to tell by simply putting two metal rods some distance apart in the ground and measuring the voltage between them with a meter because precisely the same voltage would be induced in the meter leads and the meter would measure nothing. This is equivalent to considering the earth as a homopolar generator with the earth itself revolving in its own magnetic field. Bearing in mind the non-uniformity of the earth’s magnetic field a complex pattern of telluric currents would flow which would be linked in a complex way to the magnetic field of the sun and the effect of solar magnetic storms. We then have a puzzle, why did not Rota use a simple revolving coil as detector which would be an effective magnetometer instead of an axially revolving solenoid:



Conventionally, rotation of a solenoid would only produce an output current if magnetic flux threading it changed and so axially revolving it would produce no current. Rota was well aware of the laws of electromagnetic induction so it is

supposed that he discovered that the solenoid worked by accident, not by any application of known electromagnetic principles.

Rota also says:

"Having devoted long years to the study of cosmic currents I have been lead, little by little, to verify that these currents have nothing in common with currents of the earth's magnetic field but have an existence of their own".
The universal current operates in living organisms and this is another factor that takes the universal current out of the ordinary, indeed, when life ceases the currents in a cadaver are without reaction on the synchronized metal test apparatus. In this sense synchronization is the process of bringing metal to life because a synchronized metal acts on the test apparatus in a similar manner to the response of a living organism

- Rota stated that electricity is formed from five currents. The electric component consists of two currents and the magnetic component from three. Electric current does not react with the test apparatus and is therefore dead, so electric current is a degradation of the universal currents. Rota also says that they are of cosmic origin, but one wonders if he is talking of the ultimate origin in the sense that all metals are composed of universal currents which are cosmic in origin or is saying that the act of making electric current attracts these five cosmic forces from space.

If the component universal currents originate from the metals such as in a simple two metal and electrolyte battery, then the electric current would be different depending on the metals which sourced it. Physical instruments detect only the pressure (volts) and current (amperes) or the quantity of electric charge (coulombs) and are blind to any hidden content or variable.

In conventional physics the electromagnetic field originates from moving and static electric charges. Because Rota's experiments were geophysical and concerned with magnetic anomalies it is worth giving an idea of the present day orthodox view of the earth's magnetic field.

The Earth's magnetic field is a sum of several contributions including the main (core) field, the crustal (anomaly) field, and the external source (magnetospheric) fields. The core contribution dominates the field from the Earth's surface up to about four Earth radii.

Beyond four Earth radii, the Earth's magnetic field is increasingly affected by the solar wind interaction with the Earth's magnetosphere. The distortions can be described by several external source fields caused by magnetospheric current systems. One can identify three main current systems in the undisturbed outer magnetosphere:

1. a current system on the magnetospheric boundary (magnetopause);
2. a current system in the neutral sheet of the geomagnetic tail (the surface that separates two lobes of the tail);
3. a current system around the Earth (ring current) flowing in the equatorial (minimum B) surface.

During geomagnetic storms and sub-storms, substantial changes occur in these systems, in addition to the appearance of field-aligned currents flowing out of and into the ionosphere.

It is reasonably clear that at least some of the disturbances mention by Rota are seen today in geophysical observations, particularly extra low frequency signals (ELF) however the main body of his discoveries regarding the universal current do not fit well into the present day geophysical observations. In my opinion, the origin of the universal current is to be found not in the magnetic B field which affects a compass but in some other form of magnetism. One such possibility is the magnetic vector potential which is undetectable by the usual electromagnetic methods. Until quite recently the magnetic vector potential was regarded as a mathematical fiction, useful for calculation but having no physical reality.

Aharonov-Bohm experiment showed that the magnetic vector potential is real. Nevertheless, a magnetic vector potential requires an electric current or spinning electric charges as a source. The electric currents flowing the earth are the telluric currents induced by solar activity or internal currents within the earth's crust. Another possibility depends on

whether the earth's ordinary magnetic field is fixed in space or revolves with the earth, if it is fixed the earth revolves in its own magnetic field inducing electric potentials (Faraday homopolar generator effect) and hence electric currents in the earth's crust. We could not measure this potential because the measuring instrument also had identical potentials induced in them because they are fixed on the earth. Such currents would take a large variety of paths due to differing ground resistance and also differing magnetic intensity at various places etc. which would fluctuate on a regular daily basis as the earth rotates in its fixed field. Although we could not detect the potentials which cause the potentials we could detect the magnetic effects of the currents caused by these potentials. This fits in well with Rota's hypothesis as stated in his patents

"There are certain telluric currents that produce in the earth magnetic vortices. The intensity of these currents is revealed when they meet a paramagnetic object".

For this reason it seems to me likely that that this was the path Rota originally took in his initial experiments 90 years ago.

An ordinary electric current as produced by a common dynamo will not synchronize a metal so, if we adopt this hypothesis, there must be something special about the earth's magnetic field and the electric currents it induces. To accord with Rota's findings, there is an additional variable present in earth currents which can "awaken the latent energy of the metal" which is what synchronization is.

Another interesting idea is that the universal current is a current of neutral magnetic charge. Magnetic charges (magnetic monopoles) have been searched for by particle physicists but have never been found. The great physicist Paul Dirac found that its existence was sufficient to cause the quantization of electric charge. Particle physicists believe that if they exist they would only appear in very high energy experiments and would not occur free in nature. If they do exist free in nature why are they not readily detectable? One reason for this could be that the magnetic charges exist as magnetically neutral pairs or groups of equal N and S pole charges forming a neutral magnetic current.

There are indications from experiment that something similar has been detected firstly by Ehrenhaft and recently by Mikhailov when very fine dust particles are illuminated by a bright light source. The light is needed to give the unipolar magnetic charges which are formed in pairs. Mikhailov seems to think this only happen with iron particles whereas Ehrenhaft found the same effect also with copper particles. The interesting thing is that light seems to have the effect of revealing a sort of magnetic charge which ordinarily is not detectable. Matter is outwardly electromagnetic, (the nuclear components only appear under more extreme conditions) and the magnetism around magnets and coils of wire carrying an electric current are caused by spinning electric charge or electric charge in motion.

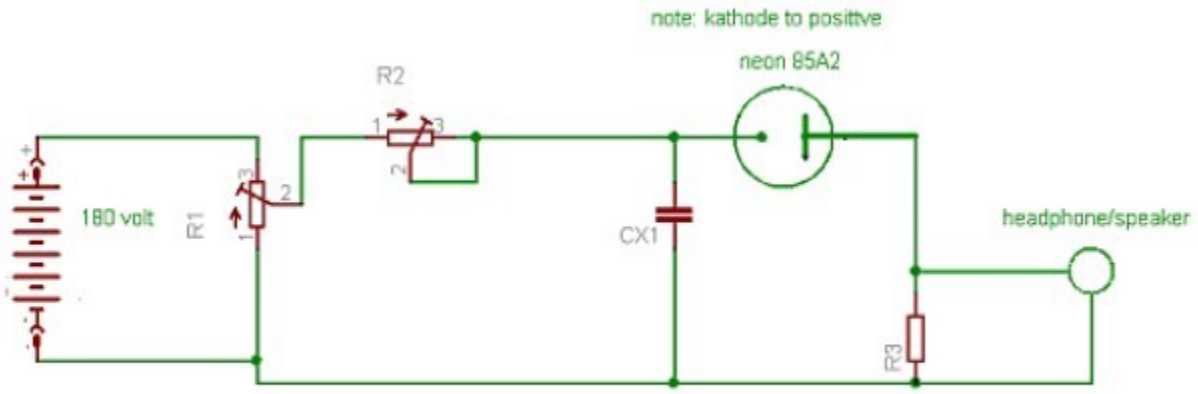
In this respect the universal current is analogous to a piece of soft iron in which the magnetic domains are randomly orientated and so has no external magnetic moment, but if placed in an external magnetic field domain alignment causes the iron to temporally turn into a magnet. Figures 10 and 11 certainly suggest that something similar happens with the universal current, we could expect that like iron the universal current is magnetizable, although it has no magnetic moment of its own. The N-S magnetic field of the earth would align components of the universal current but it would not be possible to separate the effects due to the earth's magnetic field from the additional effects caused by the universal current. It was only when Rota discovered that the universal current had different components was it possible to separate these components out from the effects of the earth's magnetic field.

Experiments

Here are some simple experiments which show the basic elements of Rota's patents using a simple electronic device. I call this the neon detector.

This circuit will show the fields that surrounds heavy objects in motion. It was originally discovered over 65 years ago by T.B Franklin and J.C. Maby. They found that they could detect aircraft and trains many kilometers away. At the beginning of WW2 it was investigated by the UK Government as an aircraft detector, but when radar was developed it was abandoned.

It is operated something like a geiger counter.



- R1 is 1 Megohm.
- R2 is 100 Kohm
- R3 is 100 ohms
- CX1 is 0.02 microfarad

Adjust R2 to maximum ohms and gradually turn R1 from zero until the just neon starts firing as heard in the phones as a clicking noise. Reduce R2 until the clicking becomes irregular and adjust R1 until click rate is about 1 per second. Reduce R2 until just above where the clicks start to appear in groups. If no click occurs reverse polarity of the neon.
Some 85A2 are better than others for this detector.

Go to an uninhabited area as far away from human habitation as possible. Mount the detector on a tripod and run a car with the engine off down a gentle slope toward the detector. You will notice bursts of click at fixed distances from the car and places where the click rate is reduced between. The car in motion appears as though it were surrounded in zones at fixed distances from it. This can be readily computerized. It seems clear that there is an ambient field which is disturbed by heavy objects in motion and the effect is as though the objects were surrounded in spherical ripples of many meters wavelength. Before WW2 J.C. Maby found that aircraft could be detected a great distance away and trains 12 Km away. Remember there was much less motor traffic and aircraft at that time so it was easier to clearly see these effects than today.

It seems that there is an ambient field disturbed by heavy objects, especially paramagnetic objects such as cars. This is essentially what Rota was saying detecting and what the neon is detecting.

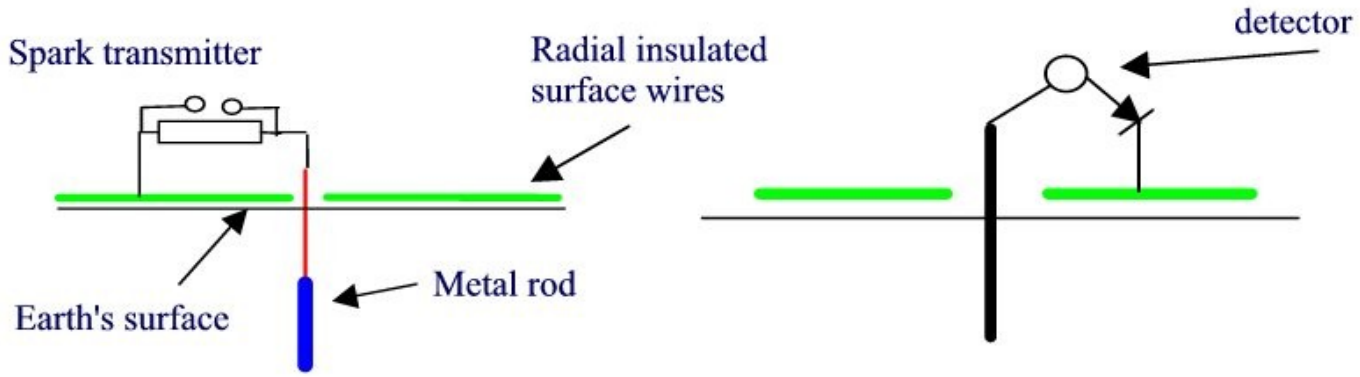
There are many unknown effects detected with this device. For example a vertical steel rod has four fan shaped beams radiating from it in N, E, S, W directions.

Additionally there are experiments done by various people with earthed radio antennas. In theory these should not work at the frequencies received/transmitted but they do except that the reception/transmission shows a strange variability. There are a number of internet sites devoted to ground radio.

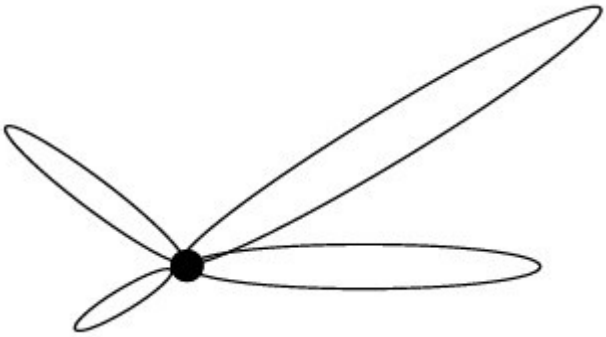
http://www.borderlands.com/newstuff/research/FelixRadio/FelixRadio.htm http://www.borderlands.com/newstuff/research/ground-myst.htm (**page captured**)

Rota seemed to start by transmitting radio signal through the ground using an induction coil and presumably a spark-gap system as used in early radio by Marconi. I suppose he must have noticed that signals sent through the ground from earthed metal probes radiated differently in different directions. From his notes it seems that he did a lot of work on the ship detector the patent of which is shown above. It is assumed that the directional effects of transmission through water persisted. In addition the directions were found to be metal dependent.

A simple experiment is as follows:



By moving the detector around the transmitter at some distance away it will be found that the signals transmit better in some directions than another:

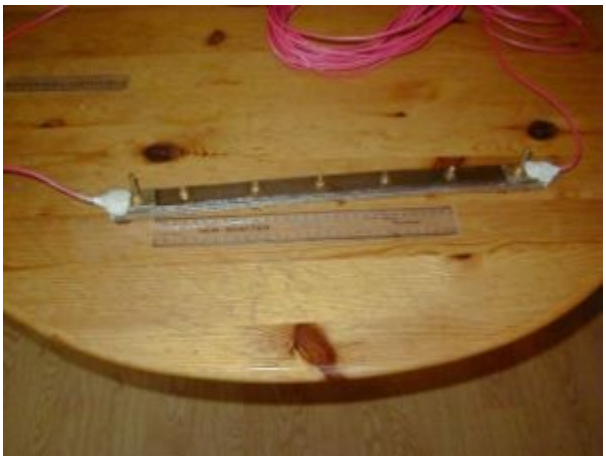


Results are soil dependent. Rota did a similar experiment in water, and avoided the soil problem.

Around 1919 [Rogers and Jones patent |Rogers and Jones] had patents from ground radio communication. Below are some of the diagrams from these patents. They are very close to the experiments that Rota was doing. Rota evidently found that putting a block of metal in the transmitting circuit slowly improved the transmission in a given direction and this was what he called synchronization. It would seem likely that the very high voltages used in spark transmission contributed to the improved radiation from the metal due to something close to ionic diffusion from the metal.

A.R Heaver who published the “Layman” articles about Rota quoted above in full said that Slade (Layman) had mentioned that Rota said that metal ore deposits “grew” in the ground from the universal current streams. Mines, where a metallic ore was extracted usually had the universal current associated with metal of the ore in the vicinity. This idea suggests some sort of ionic stream which over geological time deposits a metal.

Another thing, which points in the direction of some sort of ionic flow is seen in the Medical work Rota did with Dr. Kresser. Detection of the universal currents in a human being are by action on a metallic test piece, all the vital functions are ionic in nature, so here is a parallel between the ionic state and the universal current.



My Small test block

A Small test block and 1.5 meter deep hole partially finished for the test block.

Conclusions so far

- It is possible to transmit through the earth even at quite high frequencies. The effect is directional.
- Heavy objects such as cars in motion set up a wavelike field, which varies in a complex way but has a sequence in it like Rota says.
- Ground antennas do seem to send out some sort of “ionic” stream characteristic of the metal when excited by high voltages but this needs careful investigation because it seems to be the nub of Rota’s work.

To be Continued……

LGV Rota Patents

The following data are supplied from the European Patent Office (esp@cenet) database. You can read on line and print free of charge these patents using the**Publication number** field of the **Advance search** screen (ex: FR508472).
Here is the list of the Lgv Rota's patents found in this database, sorted by application date.

1 No English title available
Inventor: ROTA LOUIS; MILIENNE GEORGES Applicant:
EC: F16C39/06 IPC: F16C39/06; F16C39/00
Publication info: FR508472 - 1920-10-13

2 Apparatus for the Concentration of Electric Waves in a Single Direction or upon a Fixed Point.
Inventor: ROTA LUIGI; BINETTI ERNESTO (IT) Applicant: ROTA LUIGI; BINETTI ERNESTO (IT)
EC: H04B13/00 IPC: H04B13/00; H04B13/00
Publication info: GB128624 - 1919-07-03

3 Improved Means for Signaling the Presence of Explosive Mines, Submarine or other Ships, Icebergs and other Bodies.
Inventor: ROTA LUIGI GIOVANNI VALERIO (GB) Applicant: ROTA LUIGI GIOVANNI VALERIO (GB)
EC: G01V3/08 IPC: G01V3/08; G01V3/08
Publication info: GB129059 - 1919-06-30

4 No English title available
Inventor: ROTA LUIGI GIOVANNI VALERIO Applicant:
EC: G01V3/08 IPC: G01V3/08; G01V3/08
Publication info: FR536324 - 1922-04-29

RÉPUBLIQUE FRANÇAISE.

OFFICE NATIONAL DE LA PROPRIÉTÉ INDUSTRIELLE.

BREVET D'INVENTION.

XII. — Instruments de précision, électricité.
7. — Applications générales de l'électricité.

N° 508.472

Procédé et appareil pour maintenir un corps en suspension dans l'atmosphère, basé sur les forces électriques et magnétiques.

MM. Louis ROTA et Georges MILIENNE résidant en France (Seine).

Demandé le 4 octobre 1913.
Délivré le 26 juillet 1920. — Publié le 13 octobre 1920.

[Brevet d'invention dont la délivrance a été ajournée en exécution de l'art. 11 § 7 de la loi du 5 juillet 1844 modifiée par la loi du 7 avril 1902.]

En principe, l'invention a pour objet un appareil dans lequel des forces électriques et magnétiques sont réparties dans des conditions telles qu'elles réagissent sur les forces électriques et magnétiques de l'atmosphère et de la terre et l'effet de ces réactions (répulsions) maintient l'appareil en suspension dans l'atmosphère ou assurent à l'appareil une chute très ralentie.

Dans la construction de l'appareil, la partie active ou agissante est réalisée au moyen de métaux bons conducteurs de l'électricité tels que l'argent, le cuivre, fer doux, etc., tandis que les autres pièces sont faites en bois, en aluminium ou tous autres matériaux légers.

Sur le dessin annexé, on a donné à l'appareil la forme cylindrique, mais on pourrait lui donner toute autre forme convenable avec la destination de l'appareil.

Sur ce dessin, la fig. 1 montre une élévation de l'appareil avec parties en coupe et la fig. 2 montre une vue en plan de l'appareil coupé par X–X de la fig. 1.

Le corps de l'appareil se compose d'un cylindre vertical fermé et muni de deux fonds 1, avec rebords débordants, qui maintiennent chacun une tige centrale 2.

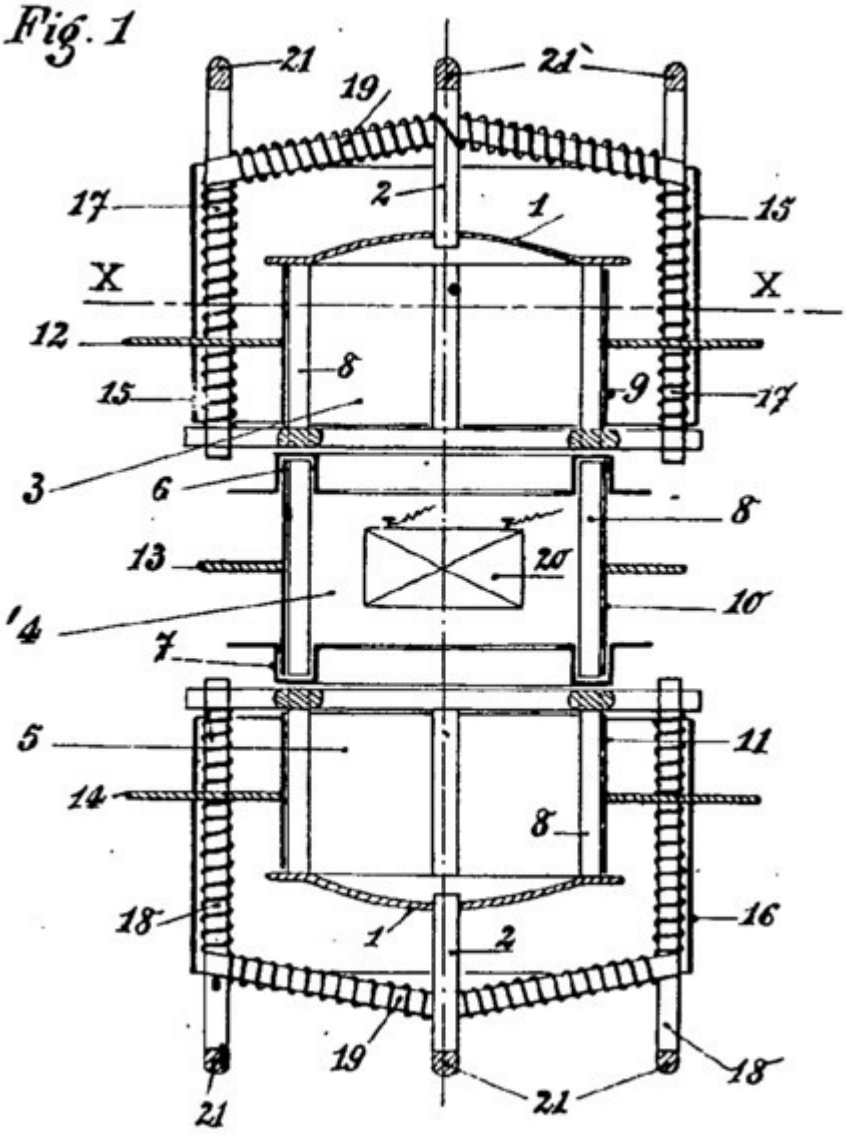
Le cylindre, sur sa hauteur, est divisé en trois parties 3, 4, 5, isolées l'une de l'autre par des bagues isolantes 6, 7, embouties pour emboîter les extrémités de la partie 4, les parties 3 et 5 étant semblables et disposées symétriquement de part et d'autre de la partie 4.

Le cylindre est constitué par des montants 8, en nombre variable suivant la grandeur de l'appareil, qui soutiennent des enveloppes métalliques circulaires 9, 10, 11 constituées par des feuilles minces d'un métal bon conducteur. Ces enveloppes métalliques sont solidaires chacune d'un disque métallique mince. Ces disques sont représentés en 12, 13, 14.

Concentriquement aux parties 3 et 5 du cylindre central, et solidaires des disques 12 et 14, sont montées des enveloppes métalliques 15, 16 en feuilles minces de métal bon conducteur et ces enveloppes sont maintenues par des armatures 17, 18 reliées par des traverses 19 aux tiges centrales 2. Les armatures 17, 18 et les traverses 19 sont enroulées de fils de cuivre de façon à constituer des solénoïdes, qui sont alimentés de courant par une source d'électricité 20, pile ou autre génératrice, disposée à l'intérieur de la partie centrale 4 du cylindre central. Le courant

Prix du fascicule : 1 franc.

Fig. 1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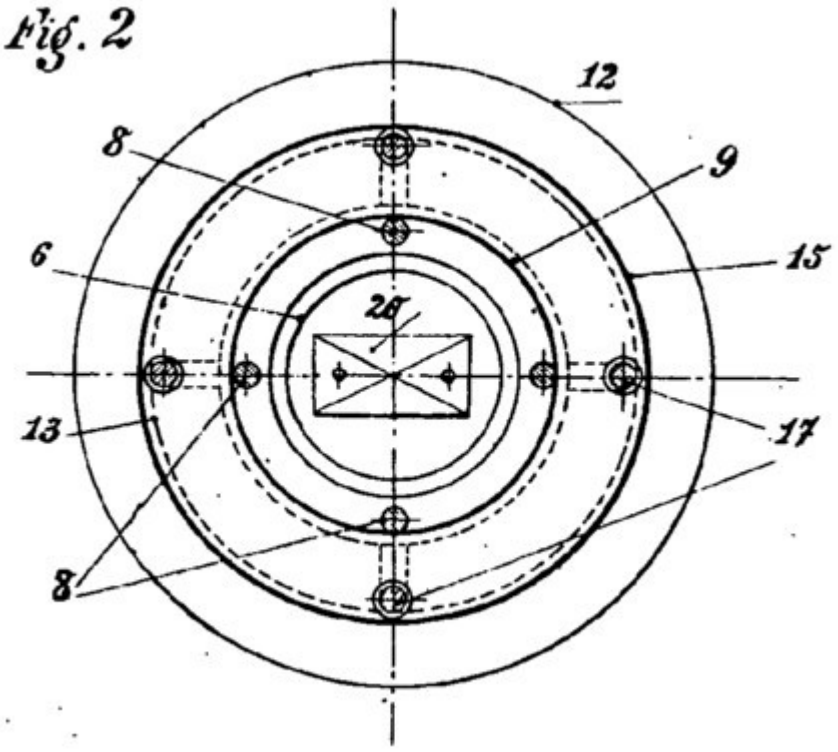

In principle, the invention relates to an apparatus in which the electric and magnetic forces are distributed in conditions that respond to the electric and magnetic forces of the atmosphere and the earth and the effect of these reactions (repulsion) keeps the group suspended in the atmosphere or ensure the system falls very slowly.

In the construction of the apparatus, the active part or active is performed through good metallic conductors of electricity, such as silver, copper, soft iron, and so on. while the other parts are made of wood, aluminum or other lightweight materials.

Drawings attached, gave the cylindrical shape of the device, but it could give any other form suitable for the purpose of the device.

On this drawing, fig. 1 shows an elevational view of the cutting device and with parts VUW Fig 2 shows a plan of the aircraft intercepted by XX in Fig. 1.

The body of the device consists of a vertical cylinder with two closed funds 1, with bells head, each of which contains a central rod 2.

The cylinder, its height, is divided into three sections 3, 4, 5, isolated from each other by insulating rings 6, 7, aims to follow the end of Part 4, Parts 3 and 5 being similar and symmetrically placed around all 'the other side 4.

The cylinder is made from 8 amounts, variable number following the size of the device, which supports envelopes metallic circles 9, 10, 11 consist of discs of thin sheet metal. These disks are represented in 12, 13, 14.

Concentrically in parts 3 and 5 of the central cylinder and discs 24:14, metallic envelopes are 15, 16 in thin metal sheets maintained by reinforcements 17, 18, 19 connected by a central tie rods 2. Led armatures 17, 18 and ties 19 are guided by the son of the way in copper laminate has solenoids constituent, which are powered by an electric current generator 20, battery or other generators within the central part 4 of the central cylinder. The current could also come from electric waves on a wire.

The frames 17 and 18 and the central pole 2 are 21 external magnetic masses that form the electromagnets.

In operation, the disc 13 will be home to a range of positive and disks 0:14 will be the site of a negative field.

Since the electrical state of the atmosphere is not stable and can vary, a possibility of change brought connections solenoids inductors 17, 18, 19, if necessary, the legal 0:14 may be the site of fields and contrary polarity so that the camera always says magnetic fields, which is still the subject of an attraction by the forces of the electric atmosphere and has a repulsion from the terrestrial magnetism.

Some Rota's notes reference a brevet using the Application Number:

Nr Patent	Application	Application	Accepted	Complete Accepted/	Title / Abstract

		date	nbr		Published	
1	FR508472	Oct. 4, 1913		26 Jul 1920	Oct 13, 1920	"Electro Gravitation"
2	GB128624	Aug. 14, 1917	11,658/17		Jul 3, 1919	Apparatus for concentration of Electric Waves in a Single Direction or upon a Fixed Point
3	GB129059	May 28, 1918	8778/18		June 30 1919	Improved means for signalling the Presence of Explosive Mines , Submarine or other ships, Icebergs and Other Bodies
4	FR536324	May 14, 1919		Feb. 9,1922	Apr 29, 1922	French version of the above patent

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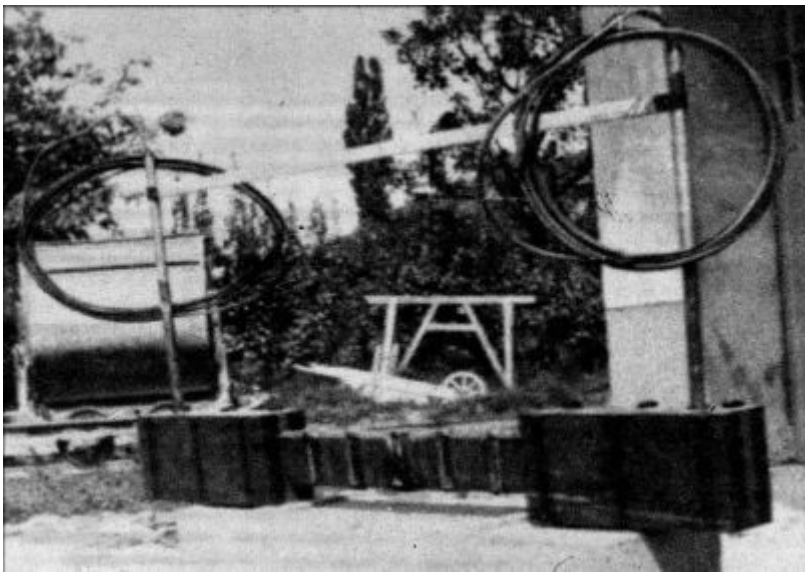
Earth Antenna



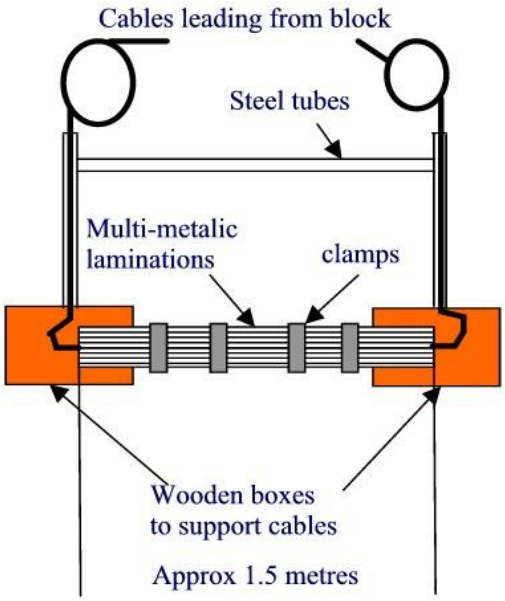


Fig. 1 (above) shows a block before burial. The block is the black object. Note the cables that are brought out through steel tubes from the block itself. The rectangular objects at either end of the block are wooden supports for the cables and steel tubes which contain them.

The block is constructed of triplet sandwiches of different metals. A number of the triplets are clamped together to form the whole block. See Fig 1, Fig 2, Fig 3. The metals forming the “bread” of the sandwich are clamped at both end and are shorted out so they do not form a capacitor. The central metal the “meat” in the sandwich is heavily insulated from the metals either side.

The constituent metals each have their characteristic currents and these were linked together into a whole concordant group. This happens without any help from man and is done by nature. The block therefore has a signature and this signature matches that of the universal earth current which is to be investigated. The block is in effect tuned, that is "synchronized", but this time not just internally but also to the universal current group in the locality. The effective resonance between the block and its associated currents causes the innate energy imprisoned in the block to be released in the form of more universal currents, all the metals in the block contribute, enormously amplifying the small input. All this occurs naturally, however the process takes some years.

The block when active is in a state which is only found in living organisms. It is no exaggeration to say the block has come alive. More on this can be found in the medical applications article by Dr. Kresser (see Medical Applications).

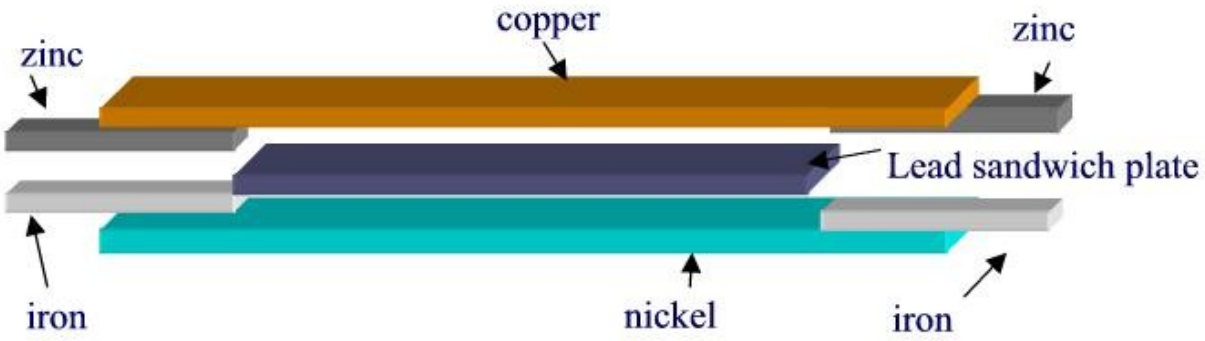


Fig 2 Construction of one of the many triplets in a Rota block. Note different triplets had different metal combinations. The central sandwich is always lead or iron heavily insulated with varnish. The end tags of, in this case zinc and iron are riveted to the copper and nickel strip respectively.

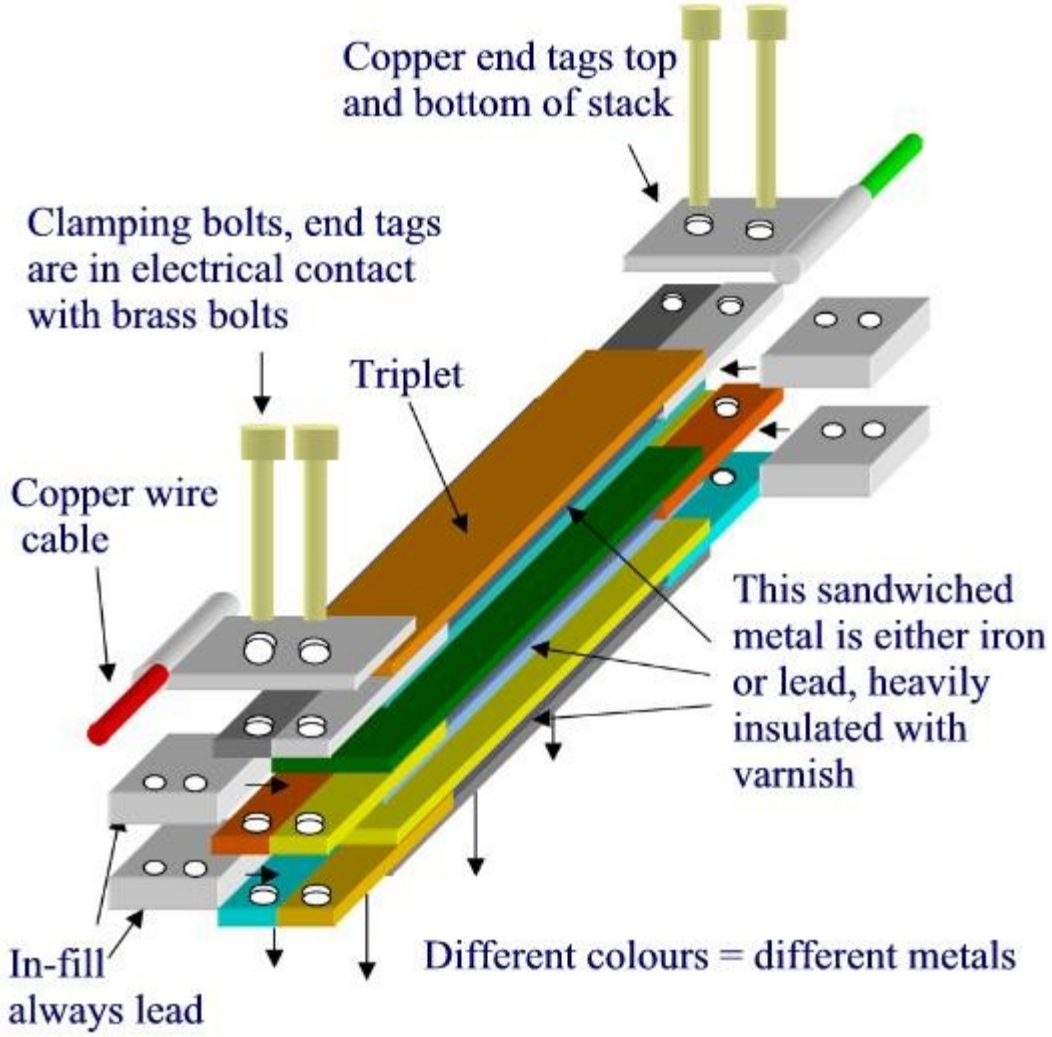


Fig. 3 Construction of a Rota block. 3 triplets shown. Possibly up to 50 of the triplets were clamped together to form one block. The overall length is roughly 1.5 meter and the metal strips are about 1 to 5mm thick. The width is approximately 60 mm.

Fig. 3a. More blocks showing laminated construction and thick cable emerging from one lamination.
The buried blocks were the energy source. The energy from buried blocks could be used to charge little above-ground blocks, which were in the laboratory, these small blocks were charged by connection to the buried blocks. These small blocks held their energy for some months before requiring recharging.

The small blocks could be used as energy sources for gas discharge lamps of special construction. The electrodes of these lamps consisted of different metals all rendered active which were connected to the small power source blocks. The lamps were filled with low pressure inert gas mixtures and glowed with a cold white light. Although the glow looked similar to common electrical ionization it was caused by a different mechanism, namely excitation of the intrinsic currents of the metal and inert gases themselves by the universal currents fed from the power source blocks. Fig.11 shows two different lamp excitation blocks. I will return to the lamps and lamp excitation blocks later.

There were other blocks used for medical purposes and also for water location. Detection was done by listening to the currents with a pair of headphones. I must emphasize that none of this involved dowsing methods but was a physical process involving actual listening: Fig 6. As can be seen in Fig. 6 an assistant is listening, while Rota does some other checks.

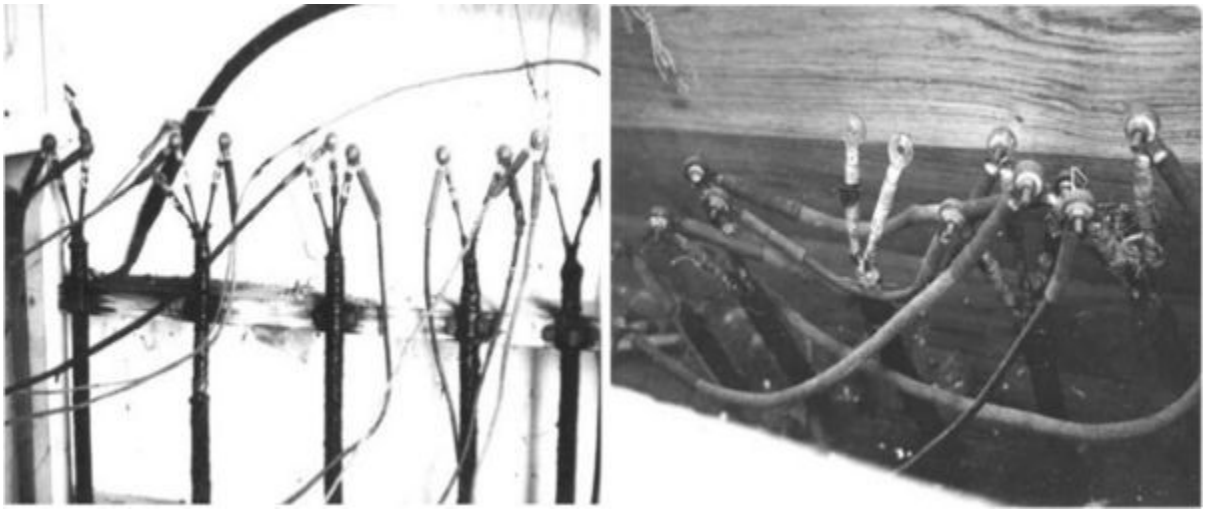
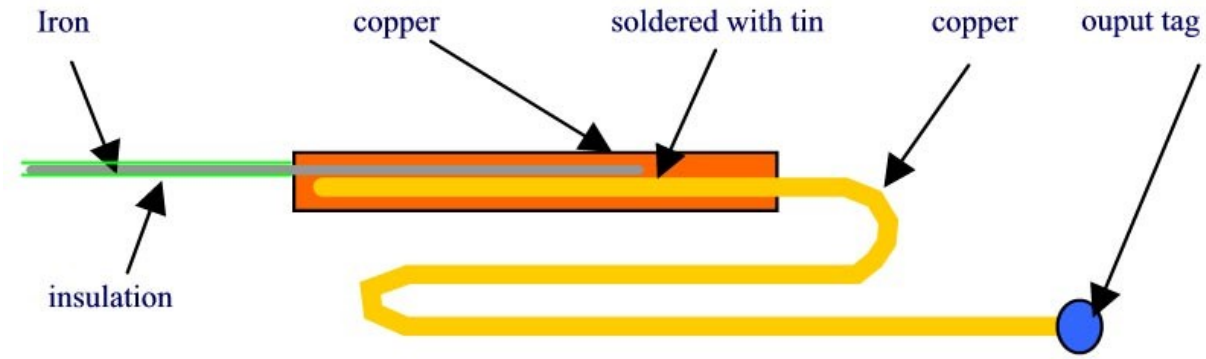


Fig. 4 Junction boxes connecting various cables from buried blocks. Note the thickness of some of the cables.

Fig. 6 Rota (standing) and assistant (listening with headphones) testing universal current flows. Note the four sticks in the ground, and a probe rod can just be seen to the right of the stick in the foreground centre. The black box at Rota's feet and the device on the tripod can be seen in more detail in subsequent photographs.

Typical Probe



Note the probes in the ground are arranged in a square N, E, S, W. Each probe was a varnished iron rod soldered with tin to a copper plate. Also soldered to this plate was a copper rod the end of which had a terminal tag soldered to it, using pure tin.

Layman's Articles

Layman wrote three articles about Rota's work. Having seen Rota's own notes, I can confirm that Layman's articles paint a fair picture of Rota's claims and though general are not exaggerated. These articles, which originally spanned several issues of the Modern Mystic and Monthly Science Revue, are condensed into one.

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UNIVERSAL CURRENTS by Layman

As Dr. Kresser once remarked, “It is the fecundity of a discovery that is the measure of its importance to mankind”. Anyone with eyes to see and a brain to think must realize that “Les Courant Universels” if they mean life and death to mortal man must affect everything in nature and more than that. For if man is the acme of creation so must all physical phenomena passive and active respond to if not result from the variable activities of these creative currents. What are they? From whence do they originate? The writer a mere layman can offer nothing in reply to these questions beyond recounting some oracular remarks made by Rota over a long series of years and of a few episodes in his long acquaintanceship which may not only be interesting but might help the minds of the more instructed to some definite conclusions.

During the last war (WW1) L. G. V. Rota had had small laboratories in Marseilles and later in Paris: He was a protégé in those days of an Italian gentleman, an Allied official of prominence who was aware of Rota’s antecedents. At Marseilles in the late summer of 1915 Rota gave a demonstration of a metallic body, floating in the air. This was the “stablisiteur “ to which Dr. Kresser referred; it had very small canvas wings like an airplane, otherwise it was purely metal. The wings were added to deceive all except his friends and did not contribute to buoyancy or stability.

An account of this exhibition was given in Le Figaro of 15th September, 1915. The writer’s copy was “ annexed,”(but see page 54 below) so those interested might make it their business to look this up, Presumably old French newspaper files exist in some French library in London’? The Italian gentleman died and his widow, an English lady, was unable to continue to finance Rota indefinitely. Then his troubles began. His in laboratory in Paris, during the war of 1914-18, was invaded and was broken up by persons who apparently wanted his “ secret” Rota himself suffering injury. He was then invited to London by some British naval men. Thereafter, he worked for a while for the Admiralty at Teddington being engaged primarily and supposedly on the “Concentration of Rays,” the idea being the exploding of enemy ammunition dumps (at a distance), Needless to say, he was not successful. He had at this time no installation in France such as he had created by 1939, and was working’ on a false premise regarding these currents. However, it is a fact that the relatively crude submarine detector developed during 1915-17 in the last war was based on Rota’s ideas and conception and that Britain started the recent war in 1939 with a detector; which though vastly superior, was a logical development of this. The basic principle was just that of Radar, that is; echo1. Rota was never given any public credit for this so as far the writer has been able to ascertain.

It was in 1922 that the writer of these reminiscences first made the acquaintance of Rota.

In the early stages of this acquaintanceship Rota was very secretive, and used to speak of my secret,” which he said, he would never impart to anyone unless as he hoped he had a son who could follow in his footsteps one day. He seemed more than afraid that this secret would be discovered elsewhere, saying that, if it were given to the world, the world would destroy itself.

As the years went by however, and after as he had candidly admitted he had been working on an erroneous hypothesis regarding the origin of these currents, he became more communicative eventually published in French, a small brochure of which his article in the July, 1945, issue of The Modern Mystic and Monthly Science Review, was an epitome. He was always very sensitive too of being scoffed at, as indeed he sensed he was; thus he would not come at all into the open until there was at least some irrefutable evidence that he was not either a charlatan or lunatic.

Earlier, he was pledged under an agreement with some British friends who financed him, to produce within a given time tangible evidence of the actuality of his discovery, as he subsequently described his secret.”2 He failed to do so in the

prescribed the chief reasons being want of finance before his installation in France was completed. He had misjudged his, requirements, not least because of the said erroneous hypothesis as to the origin of .these currents. It was the embryo plant in France that caused him to realize the truth (as he sees it), and which taught him many things besides. The money was not really lost only his time was. In those days he had to stint to live as well to try and complete the installation in France.

UNIVERSAL COHESION

The most one ever got out of him at the very first was, that these currents had an earthly origin and manifested in the abstractions we know as light Heat, Electricity, Magnetism, and Gravity. Subsequently, he never referred to Gravity but substituted "Universal Attraction," and sometimes Universal Cohesion." The point to being made here is that he always regarded Gravity as a force which could be controlled but said little of Magnetism. As Solomon remarked everything be twain,'. i.e., male and female, manifesting positive and negative polarity as with electricity as indicated by plus and minus and in pendulum actions, etc. Hence if Gravity as the laity knows it be regarded as positive then there must be a negative form. Ergo, herein lies the clue to what we know as weight; Atomic Weight.

ANALYSIS OF METALS

Later when he had become seemingly more familiar with these currents, Rota used to assert that one day the analysis of all metals (and presumably of other things) would be expressed wholly in terms of these currents. Also, that several of what were regarded as a single metal was actually composed of two and sometimes more unknown metals. These perhaps are what today are styled Isotopes. He always insisted on extreme purity in the several metals used in his plant and apparatus. This purity seems to be as vital to his work as it is in developing spiritual power. He used also to scout Newton's theory as presented but admitted the arithmetic of it; likewise the atomic theory. Frequently he would remark, if you split the atom, "you' ave nulling at all". By inference the power lies not in the atom but exteriorly to it.

A physicist speaking a year or two before the war at a September meeting of the Royal Society put forward a similar thesis and in the October, 1945 issue, page 88 of this journal Mr. A. Annesley Voysey, questioning the accuracy of scientific theory regarding the explosive power of the atom writes: "Can we regard it another way as a local diminution of velocity in the cosmic energy, which thus suspends its power to pass and blows everything to pieces?". This would seem to be in accord with Rota's view. Since penning the foregoing the American account of the development of the atom bomb, published by H.M. Stationery Office mentions with some frequency the "binding force of the nucleus", which is significant.

Rota's successful debut at Marseilles made him confident of being able to fulfill his undertaking! To the writer's knowledge he had begun the construction of at least three of such machines, if they can be so styled, and parts of the second were and possibly still are in London. A curious story attaches to that. These machines were all begun before he realized that his original hypothesis (though not his data) was wrong. Later he was absolutely sure he could do this but that it would require capital.

At this period he used to accurately predict earthquakes, and showed an uncanny knowledge. In those days airplanes were primitive and made embryonic test flights and distance record flights. The courses that today would be regarded as nothing was well publicized in advance in the newspapers and often Rota would write to the Press saying that if that path on the particular day was adhered to the aircraft would crash. After he had, unfortunately, proved right his warnings were no longer ignored, it was noticed that on future occasions the flight would be postponed or the course altered after his warning had appeared.

FORECASTING WEATHER

Regarding the Weather, he used to say "with a hundred men to do the calculations and I could predict the weather over every hundred square miles of the world. Was this humbug or hallucination? The question arose in the minds of his best friends. Well, from the writers personal experience: In the middle of March, 1924 Rota, a friend and the author were driving in a taxi to lunch at a well known restaurant when number two of the party said, "When is this miserable

weather going to stop?". It was a gloomy Spring rain heavy or bad light for days and no sun for weeks. Rota fished out a pencil, a stiff cuff and proceeded to do some calculations using the hieroglyphics he always employed and in less than a couple of minutes said, "It will be here until the 20th May." Nor did it! The dull cheerless weather continued until on the afternoon of that day then a warm genial sun emerged flooding the scene and the change could be felt. From then onward good weather. On one occasion three gentlemen and the writer were taking leave of Rota on the 1st September, 1927, when the writer on shaking him by the hand said "I'll come and see you again, at the end of November or beginning of December either on my way back from Spain." "What!" he said, "if you go Madrid get back to Hildenboro before 23rd December or will not spend Christmas with votre familie, you mean? Is there going to be a bad earthquake?" The Lisbon disaster came into his mind, said Rota "Very bad storm at Christmas the storm is here now." He then went on to say storm was already brewing north of the Azores. Towards the end of November the writer again on his way to Madrid Asked about the storm, Rota said "Terrible! Terrible! Worse than I thought, cold! He begins to-morrow." Rota was unconcerned by the warmer weather. On 22nd December however, the weather which had been warmer (writer returned 19th December) was followed by blinding sleet with a 60 m.p.h.; easterly gales veering to N.E. quickly changed to snow for another five days. Numbers of cars were buried and were not dug out for a month and many great telegraph posts were snapped like matches. Kent and Sussex were marooned for days. For some four or five days no ships crossed the Channel from noon of 23rd December.

A man able to forecast the weather with so far ahead obviously has knowledge denied to those of greater scientific renown. This article is written at the request of the editor for the benefit of those whose interest and hopes have, been stimu1ated by the articles which appeared- in the July September, October, November and December issues of this journal under the titles of "Universal Currents and Cosmo-Dynamism"; regarding the work of Luigi G. V. Rota, by a layman who knew him very well but who has not been in contact or correspondence with him since early in 1940. Readers of these two exposes will no doubt have grasped Rota's thesis regarding procreation, and that a healthy life depends upon the intensity and density of those Universal Currents dominant in the makeup of individuals from the moment of their conception.

Nevertheless, a certain amount of repetition by way of introducing the subject is unavoidable, so let it be emphasized that according to Rota: (1) the impacts and direction of these currents upon the earth do not change; (2) They have been the same from the Beginning; (3) they vary only in intensity and density, at some periods hourly. They may be strong in one area and weak in another at the same time. Early on Rota believed these currents had their origin in the earth and so styled them Telluric.

However, failure to realize his then ambitions for a demonstration which would satisfy any layman of their existence, led him ultimately to conclusions which were all embracing in their scope, in the realm of therapy amongst other things. In this realm he has undoubtedly established indisputable claim to credence. Actually, he has always regarded his work in this sphere as a mere sideline, but his success warrants a like credence with respect of all those other potentialities, he visualizes, to some of which I will refer later.

Reverting after this overture to the question of healing, his method expressed quite simply is, to supply the invalid with the "dominant" current and to some extent with a blend of the currents which constitute his physical and spiritual make up. There are two alternatives, one to send the invalid to live in a locality where his or her "dominant" or Life current is then strong and certain to remain so for some while; the other to make up a multi-metallic "block," to yield this Life current in requisite density, and intensity, to do so he has to strike a balance between the currents -dominant. but innate in the metals composing the " block." More than this, however, he has to take into account the then dominant and other currents pertaining perpetually to the place in which the patient is residing and to allow for their behavior during the next few months or years. Some have to be counteracted, some intensified. The making of a suitable "block" is therefore, a matter of very exact calculation, and obviously abstruse. It is thus too costly a cure to indulge in unless the patient is going to live a long while in, the same locality.

Notwithstanding this, in the interest of science Mr. Rota was doing this work for virtually nothing; he himself being financed, 1936/41 by a gentleman who died in the second, year of the War; a French Anglophile. Beyond the making of suitable blocks lies the "harmonizing" of their component metals which is done at the installation in France. This harmonizing is styled by Rota "synchronizing," but he says that it is not the right word and that a new word is required to

describe the whole process. It is done by Nature. That is, these therapeutic blocks, etc., are connected to several large blocks buried at varying depths in the ground over a large paddock behind his laboratory. These buried blocks are in some cases of a single metal and in others composed of several metals in layers. They vary much in size and weight and all have several leads in to his synchronizing room. Their numbers and variety make possible very many combinations of currents. Rota asserts that these buried blocs grow in power with every year that passes, but that does not permit the synchronizing to be done any the quicker.

NATURE OPERATES

On the other hand, a ton of metal can be synchronized just as quickly as 1 lb. can. No artificially produced energy are used, merely time and Nature and Nature operates differently at different depths. I believe that the deepest block is set at about thirty-six feet down and the shallowest at about a yard. Rota has a listening post in the middle of the enclosure set about fifteen feet down.

At present, no English patient could be fitted out with a block and mattress that were not made and "synchronized" in France. Furthermore the mattresses referred to by Dr. Kresser were only made by one French manufacturer whose works may or may not have been blitzed. The mattresses were not exorbitant in price but were luxurious to lie on. They were made of a relatively light wire, each spring having some thirty spiral coils. The coils are of some 9in. diameter at the top spiral to a diameter of about 4in. in the middle and then out again to about 9in. at the base. They are not separately made and then connected, but are all wound from one continuous length of wire drawn from a composite of metals.

RESTORATIVE ENERGY

These mattress springs have also to be "synchronized" with the block that is supplying them with their restorative energy. Incidentally, it may be remarked, that ultra purity is essential in all the metals that Rota uses for his several purposes. Furthermore no metal whose molecular structure has been impaired by a fall or a hammer is of any use. Rota works to a mathematical accuracy and. blemished metals upsets the fine balance required between the component metals. On the hypothesis that it was intended to construct a base in this country for synchronizing these therapeutic blocks, mattresses etc. what would be necessary? Firstly, of course, the installation in France would have to be duplicated but not just anywhere. While there are a number of suitable sites about this country, if time is to be saved, the one selected must be on what Rota calls "on the same line" as the original in France. Years ago he had visions of one day constructing such an installation in Kent; Canterbury being on the same line of current or currents.

There is a corroborative check here in that like weather conditions will be found to prevail on most days of the year in Canterbury and the original installation and to almost the same extent between that and London. The large "blocks", required to be made and buried in the ground for such an installation could be "synchronized" in France prior to internment for immediate use when otherwise this process would have to be left to Nature for perhaps four years for the "blocks" to attain an adequate degree of potency. Some hundreds of yards of trenches and many pits would have to be dug, wiring laid and covered in and several hundred yards of aerial wires fixed to posts about fifteen feet above ground. Above all one very complex apparatus of some 7,000 small parts would have to be installed in the Laboratory, all likewise "synchronized.'. The parts of this all important original apparatus, which cost a great deal of money to construct were all made in duplicate and were once stored in this country. It should not take very long to replace them if the original drawings are not destroyed and escaped the prying eyes of the Germans. It was Rota's dream that such an installation should be on a much larger scale than in France for other purposes and in his eyes of much greater import, which in their whole may be summed up in the phrase, the Peace and Prosperity of all mankind.

BIOLOGICAL DOMAIN

Before proceeding to mention such other potentialities and prospects envisaged by Rota, a few illustrative reminiscences of his achievements in the biological domain should be of interest. One of the earliest of these was related to the writer before he had contacted Dr. Kresser and when he was still discouraged by skepticism. The story was confirmed years later. One day the Cure of a village church nearby who was aware of Rota's ideas, told him of his

concern lest he should lose his organist because of conjugal friction. After five years of wedlock there was no offspring and the Cure in venting his anxiety said," I believe if only they could have a child harmony might result. Have you any solution? To which Rota replied, "Yes, perhaps, but I shall have to question them first". The Cure said he thought he could arrange for this. A day or two later after he had time to make his calculations, he said." I think if Monsieur and Madame will go and spend three months at P." (e.g. in the Pyrenean foot hills}, "Madame should find herself enceinte before very long." They went. Later came a letter saying that the lady had reason to believe she was pregnant, and in due course a healthy child was born. Here the point may be made, that if anyone from England went to consult Rota for the same purpose, he could give them the required advice, as seemingly he is aware of the intensities of these currents at any place and at any date, way back into antiquity. Since those earlier days he has even devised a method of deducing by examination the time and place of conception if the client or would-be patient cannot supply the information. If this is fact, surely there is little to equal it in the realm of scientific achievement.

HISTORICAL CHARACTERS

It was intriguing to hear him speculating (or was he?) upon the behavior of some famous characters in history. Of Napoleon he used to say that he could never have made a success of his Russian Campaign because both his mind and his body could only have been much below normality , during the crucial period especially when actually in Russia. Dr. Kresser spoke of a little lad, the son of well to do parents, living in Paris who was always ailing and in a few months was so transformed by Rota that he resisted the infection of a virulent Influenza which had struck down every member of his father's household.

This gentleman was very friendly with Rota and one summer arranged to take him on a holiday trip to his native Savoy. A day or two before they were due to depart Monsieur L. said, that his mother , an elderly lady, was very ill and she might die at any moment, he must cancel the trip, Rota who presumably was acquainted with the cause and origin of her malady said she could not die before 19th October. So it transpired. According to this strange man there is the substance of a reason in the Italian word "influenza," e.g., influence. At one time he was always ready to forecast the periods of incidence of this and often fell into a malady state whether the outbreak would reach epidemic proportions. Also he used to speak of some of these currents as being malefic to everybody one in particular which he called, La vielle femme [The old woman].

STREAMS OF ENERGY

May not the 361 currents he claims to be able to identify be likened to 'streams of creative energy radiating from the *Divine Mind* and might there not be very many more?

The writer, although he has traveled thousands of miles on the sea, and who has often crossed the Channel, always hated these crossings being a very bad sailor. Knowing this, Rota always advised him in advance of the best day and by which sailing on that day to cross. The writer never once was misinformed by Rota yet he never made elaborate calculations. It was simply that he was almost daily and nightly listening to his currents. Anyone who knows the Channel well is aware of its vagaries especially near or in the Straits of Dover. It can be rough when there is no really strong wind, and not so when a really stiff wind is blowing (the direction of the of course makes a lot of difference). It can be smooth on one side of the channel and rough on the other, a rough sea can get up almost without notice. The reason for this panegyric is to lend support to Rota's view that rough seas are not necessarily due to wind, though it may contribute. All storms, according to Rota, are due to a loss of balance between currents.

The cause of a high wind and a rough sea may be one current but not necessarily. For example: A current of a certain nature (or frequency?) becomes dense "and another Intensifies or another weakens excessively." This is rational explanation of the causation of earthquakes (not tremors) as well, but being aware apparently, of the law of the cosmic periodicity, governing the behavior of these currents he correctly forecast both earthquakes and the weather. The clouds may be heavy and replete with water but there can be no rain without its current was another of his several oracula dictums. Also according to Rota, *the Moon does not govern the tides* but they are due to "the breathing of the earth".

Before we leave the matter of meteorology etc. there two more relevant items worthy of recall. The first relates to firedamp, which takes such .a toll of precious lives in coal mines. None can tell when to expect an onset of danger, yet if careful records over several years had been kept of its occurrence in Britain and the Continent, it is tolerably certain that a pattern would result from where some useful deductions might be made. According to Rota such onsets are not fortuitous but can be calculated well in advance in the same way as the weather. At one period when money was short and before his installation was equipped, he conceived the idea of making a small firedamp "barometer" to hang in the galleries of coal mines to be sold at about half a guinea each. He claimed that this gadget "would give at least a month's warning of an occurrence".

ANTICIPATING RADAR

(see footnote on page 4)

The second item relates to flying altitudes. He had assured certain military friends that it was impossible for airplanes to fly above a certain height over a historically famous frontier region except on twenty or twenty-one days of the year. In other words, except on these exceptional days the planes would be well within range of the guns. Tests were made by the military and so it proved.

As a result of these happenings Rota was employed for, some months to make a secret survey of all the frontiers of that country for which he was paid well. Because of remarks he let fall regarding the location of minerals etc., Rota was also employed to locate the positions of arms and munitions depots over the frontier in foreign territory. Their positions he had already closely approximated by their reactions on his recording apparatus at the installation. For exactness however, Rota postulated that he must follow the frontier round with certain other portable apparatus; all incidentally unaided by electrical impulses. So it was arranged. Rota's readings confirmed the positions of certain depots already known to the military and he located several others besides. This all seemed excellent to the soldiers until someone remarked that if he could locate these then he should be able to spot the French depots as well. "Sûrement!" said Rota, proceeding to indicate the whereabouts of some. This caused momentary consternation amongst the military who felt they were betraying *military secrets*. A few years previous to these happenings, Rota, with such apparatus as he then had was able to follow the Italian General Nobile's flight to the North Pole. He had in fact plotted his route and indicated the spot where the dirigible had grounded long before the latitude and longitude of the scene of the disaster had been determined.

About October, 1939 Rota informed the writer by letter that he had good reason to suppose that. A secret enemy wireless station was operating in a certain part of these islands. This was duly reported to the proper authority, "who asked if it were possible for Rota to give the exact position". Now because of the war, Rota had dismantled all of the overhead lines across his meadow surrounding the installation until it appeared again to be just the innocent paddock of a farmhouse. To supply the information therefore he had to re-erect all these aerials again, which he did.

About three weeks later he gave precisely the latitude and longitude of the spot; moreover a week or two after that reported that he had located two more, eventually pin-pointing these in the same way. These stations were still functioning when correspondence with Rota ceased with the invasion of the Low Countries.

A NEW PRINCIPLE

What is of significance, however, is what Rota had to say about these stations. Firstly he maintained that they were transmitting by means of some *wholly new principle* of wireless not by electrical impulse. Secondly, that the transmitters were situated on the sea coast yet in water about 200 feet deep. Thirdly, that they were transmitting only in one direction. Fourthly, that these transmissions could be picked up by submarines and that only if the submarine surfaced and relayed them by ordinary wireless to another submarine on the surface or to an airplane could the messages cross land. The sea was the medium. Here were a number of mystifying statements, which in those days might well cause skepticism and consternation. He had arrived at these conclusions just by listening without the help of electrical amplification. What led him to make these deductions? Primarily, his conviction that all metals have direction. The writer has always assumed this direction to be that of the dominant current which creates their respective substance. It

will be remembered that, according to Rota, *all crystallization* originates from these currents and that they are constant in their direction.

Rota's own belief was that the Germans had made this discovery in respect of one metal only and that by some, fluke they had "synchronized" this one metal and were making use of the energy so "attracted " to transmit with. Pondering over the matter it appears probable that these transmitters in Britain were designed to react to certain weather conditions so giving the Germans information vital for *weather forecasting*. Outside Britain it may have been otherwise and the spoken voice transmitted by the same natural energy; if indeed the transmitting force was such and not electricity. In the latter case the British "Sono-Buoys" automatically informed airplanes of the where abouts of submarines would represent a parallel. Doubt on whether or not the Germans had stumbled in part upon Rota's discovery that metals have "direction" and were using just one metal as a carrier wave, arises from a warning given to the writer by Rota in November, 1939.

He said in effect, "If the Germans have made this discovery then it should, not take them long to achieve another short step forward when they would have at their disposal a means of destroying all the electrical generation plant in Great Britain and she would be helpless." Seeing that the only damage sustained by generating stations was from bombs and incendiaries, was he right in his first assumption concerning these clandestine stations with which the Germans were equipped at the outbreak of hostilities? If he was right then the Germans failed to take the extra step referred to. Certainly during the first six months of the war they seemed to have information of various happenings almost as soon as they had taken place. Was this by normal wireless portable transmitters or, by means of such non electrical apparatus as Rota visualized from just listening? The last two words may provide the answer for his claim was that only he had the means of audition beyond the Germans themselves.

FUTURE WIRELESS

Electricity being a degradation of energy, what then is Rota's idea of wireless equipment?

According to Rota messages transmitted by natural energy could only be received by a receiver having a diaphragm "ear drum" or reverberating face made from the same sheet or block of metal and "synchronized" (or the equivalent) at one and the same time and for the same period as the transmitting unit. In making this statement the write adopts the hypothesis that this new method of wireless transmission which Rota undoubtedly believed was being use at these clandestine German stations in this country and elsewhere were designed to operate after a manner which years later he described as being the wireless of the future and which alone he held could be wholly private and unstoppable being quite unaffected by atmospherics.

Incidentally, another of Rota's dictums is that what are styled atmospherics would not interfere with ordinary radio receivers but for the impurities in the metals used in their construction, which impurities in the metals used respond strongly to intensification of those currents which create these impurities coupled perhaps with a temporary decadence in the parent currents of the main metals used in the construction of the valves, aerials etc.

Purity again is the essence of good reception. Conceive then a block of metal to have been synchronized and then cut into tiny thin sheets or discs. Place these disks in say various parts of Australia keeping one at home and there will be a constant flow of affinitive energy from the one to the other in Australia for some years, which flow acts as a carrier wave. This is the foundation of wireless as Rota sees it. Amplification and neutralization of locally interfering currents presumably would be cared for by suitable blocks at either end, similar to those blocks used with his mattresses etc. which are in effect batteries or accumulators.

Nature and detection of the Universal Currents

The Works of Louis Rota

The work of Luigi Giovani Valerio Rota 1886-1951 By Mike Watson

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[hide]

- 1 Introduction
- 2 Early research
- 3 My Interest
- 4 Background

Introduction

L.G.V Rota in a wind tunnel

L.G.V. Rota was a Frenchman of Italian origin. He was born 1886 and died in Genesieux near Valence, France in 1951. His early life is relatively unknown. He was involved in early aviation and experiments in wireless communication and also anti-gravitation. He originated in northern Italy and was contemporary with Marconi so that he was almost certainly influenced by his work. Rota wrote little about his discovery: The Universal Current. He produce two short booklets, based on seminars, one in collaboration with a medical Doctor Kresser, and another in which he briefly outlined his work, but with only general details as to how the universal energy he claimed to have discovered was tapped or used. Neither was there any significant theory. However, Rota did discuss his research with one or two confidants, notably a man called Slade who wrote some articles on Rota's work. Later, after Rota's death the author visited his laboratory, obtained some of Rota's laboratory notes and examined some apparatus. Some years later the author met Rota's son and he showed me apparatus and notes I had not previously seen. Using this data and after many experiments over the years, it has been possible to piece together to some extent a coherent idea of Rota's discoveries.

A Rota's block

Around the time of the end of First World War, Luigi Giovani Valerio Rota discovered a new naturally occurring non-electromagnetic energy which, he claimed, controlled the manifestation of all matter. This energy, which he called the Universal Current, flows some few meters below the earth's surface. The energy flowing within the earth generates a field in the atmosphere. It was tapped by large buried laminated metallic structures which Rota called blocks. The

energy could light lamps, power machines, inhibit electromagnetic propagation such as radio waves and stop or control electromagnetic induction, and also develop antigravity effects and is involved in the life process. Rota maintained that all matter is made of condensed Universal Currents and that any metal could be slowly dissolved releasing the condensed Universal Currents from which it was made. The enormous energy developed during the dissolution of matter could be harnessed. The released energy was not in the form of charged particles but in the form of more Universal Current, which in turn, could be converted into electrical energy. The Universal Current was generally (but not always) harmless and although similar in behavior to electricity it is much more fundamental. Rota understood electricity as a *degeneration of* the Universal Current. In short, matter is composed of nothing but Universal Current and could be decomposed back into it.

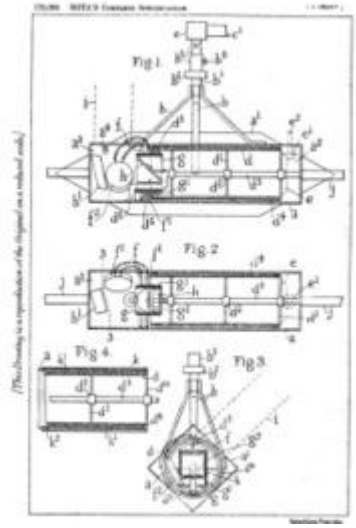
Early research

Rota's early interests seem to have been in aviation and possibly early wireless transmission, but there is no information surviving from this period. At this time (1910-1915) he had a laboratory in Marseilles and it was there that he devised and experimented on several unusual aircraft which finally resulted in what he called the "Stabilisateur"(a description is given later in this document) which he defined as a device that *floats weightless in the air*.

He claimed:

"The device works by opposing the magnetic and electric field of the earth rendering the device weightless".

This claim would at first sight appear impossible, nevertheless the device worked and later a version was given a public demonstration and reported in the press at the time. During one of these experiments he touched the Stabilisateur and received an *enormous electric shock* which rendered him unconscious for 50 minutes. Rota said that the voltages and currents used in the machine were very small and he could not understand how a potential of such a large magnitude build up. The search for a solution, ultimately lead him to the discovery of the **Universal Current**. This unknown energy, he thought, had amplified the small electric current used in the machine.



Around 1910-1918 on the suggestion of one of his teachers Rota seems to have been involved in investigating earth currents. Lord Kelvin had advanced the notion that due to non-uniformities in the earth's magnetic field earth currents are produced as the earth rotates in its own magnetic field. Rota's notes of the period show that he thought the telluric

currents originated deep within the earth itself and were not external in origin, in short, he had adopted Lord Kelvin's view. He found that magnetic fields produced by these currents were perturbed by the presence of ships aircraft etc and Rota used this effect to locate the position of ships and aircraft at a distance. He took out patents on the associated apparatus, the text of which is below, and he used a version of it in all his later research. Although he thought that the magnetic disturbances which the apparatus was detecting were caused by telluric currents, around 1923 he started to change his mind. Sometime later he finally decided that the apparatus was detecting a much more fundamental energy of which electromagnetism was a mere byproduct, this energy he called the "Universal Current" because, in his view, it lay at the root of all physical phenomena including the life process.

Mt St Aignan Laboratory

Although his first laboratory was in Marseilles in the south of France, from the early 1920's to the end of the 1930's Rota had a laboratory in northern France near Rouen at Mont-Saint-Aignan. Around the outbreak of the 2nd world war he moved close to Romans near Valence in the south of France and set up a new laboratory there. Both the Rouen and Romans facilities were quite large. He was evidently quite wealthy, his early work being funded by a family friend and it seems that between the wars on at least one occasion, he was under contract to the French government.

My Interest

I became interested in the research of L.G.V. Rota after reading an article on his work in a long defunct popular fringe science journal called the Modern Mystic and Monthly Science Review. The article was entitled "Universal Currents" by a person writing under the pseudonym of Layman. The editor of the Modern Mystic, A.R.Heaver knew Layman. It turned out that Layman was a retired geologist by the name of Slade, who got to know Rota well over the years between the wars, and the three articles in the magazine were an educated layman's account of the bits and pieces of information that Rota had imparted over this period. These articles are included below.

When the author met A.R.Heaver in 1958, the Modern Mystic and Monthly Science review had already been defunct for some ten years. Also both Layman and Rota had died, but Heaver put me in touch with a man who had known Rota since childhood, he also knew most of the people in the area in which Rota had his laboratory. A visit to what remained of Rota's laboratory was organised and it transpired that some of Rota's equipment was still fairly intact although some of the equipment had been removed and some dumped in an outhouse used by a local farmer as a shed. I managed to finance the digging up of one of the many metal blocks that Rota had used to tap the universal current, and subsequently brought the block to England for examination.

Some 16 years later, out of the blue, I was visited by a Frenchman, Guy Leblond, who knew about L.G.V. Rota and he informed me that Rota had a son. I shortly afterwards met Rota's son, Daniel Rota in St. Malo in northern France. Daniel Rota was only a small boy when Rota died and he knew that his father had made some important discovery, but not being a scientist he understood little about it. However in the intervening 16 years since I had visited Rota's laboratory he had brought most or all his father's papers and laboratory equipment up to his then house in St. Malo . He allowed me to see and photograph the equipment (some of which are shown below).

Sometime later Guy Leblond unexpectedly visited me with a piece of Rota equipment I had not previously seen. Leblond said this was called the "Transducteur". I had not been shown it previously because Daniel Rota believed it as containing Rota's "secret" regarding the universal current. It seems that the in part Transducteur amplified the Universal Current

sufficiently so that they could be heard without electronic aid, since Rota invariably used headphones and even galvanometers to detect the Universal Current.

Background

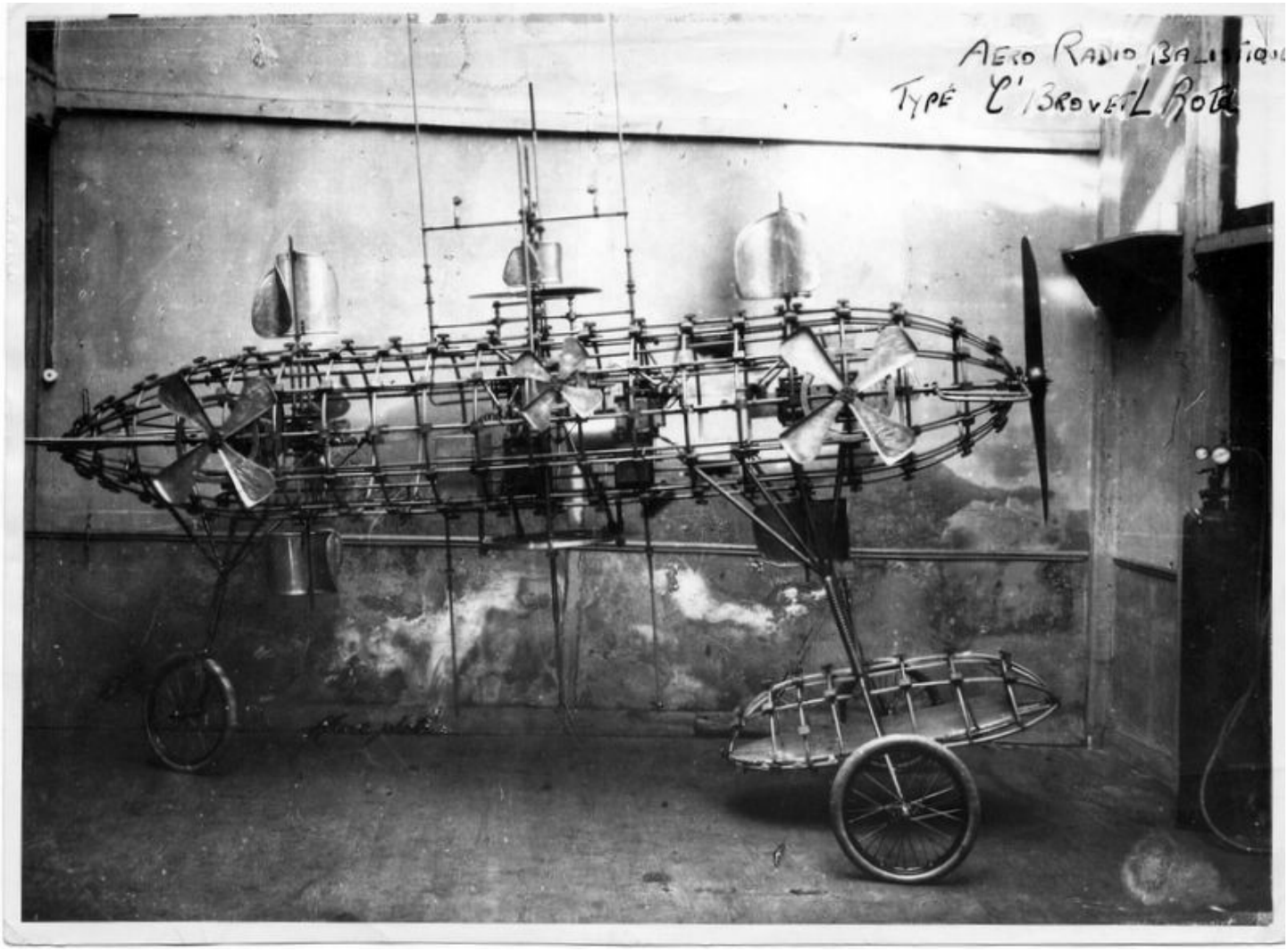
Natural electric currents called telluric currents were well known to 19th century scientists. These electric currents are due to induction from disturbances of the earth's magnetic field caused by solar flares and storms. Magnetic storms induced quite heavy electric currents in the earth's surface which, while they lasted, blocked telegraph transmission. The sensitivity of the apparatus of the time to disturbance was due to the use of an earth return in the telegraph circuit. The earth return consisted of large buried metal plates one at each end of the circuit. The telegraph circuits stretched sometimes 100 Km in length and consequently magnetic fluctuations due to solar magnetic storms would induce currents in the overhead wires causing spurious telephone/telegraph signals. Magnetic devices such as electrical transformers relays etc. would saturate. On some occasions the electric currents would reach formidable levels. It is likely that the disturbing currents which existed in telephone wires and the rather strange behavior of these disturbances interested Rota and lead to his research. This is not unknown today [Facts|1].

The Stabilizer of 1915 (Aero_Radio_Balistique)

Sciences fiction or reality? We were not able to find absolute proof that this invention was able to fly. What is certain is that this experiment helped him to build the "Universal Current" concept.

Contents

- 1 Did this machine really flied one day of September 1915 ?
- 2 See Also
- 3 Rota's note on the construction "The Aero Radio Ballistique Type C"



The AeroBalistique (1914?)

Did this machine really flied one day of September 1915 ?

In the Headlines of "Le Matin" November 15th, 1915

(Havas.) ALBERT.

Du Jules Verne en action

MARSEILLE, 13 septembre. — *Du correspondant particulier du « Matin »*. — Actuellement réside dans notre ville un ingénieur italien qui aurait fait une stupéfiante découverte en résolvant le problème de l'immobilité absolue d'un corps dans l'espace.

Le professeur Louis Rota — c'est son nom, — aurait inventé un appareil qui, triomphant de la loi de la gravitation, pourrait se tenir immobile dans l'air à une hauteur de cinq cents, six cents, voire mille mètres, et serait susceptible de supporter un poids considérable.

On pourrait imprimer à cet appareil une vitesse prodigieuse dans n'importe quelle direction et l'arrêter à n'importe quel point. Tout cela, bien entendu, sans moteur mécanique d'aucune sorte, simplement par l'emploi des ondes hertziennes.

Le principe de cette invention reposerait sur une répartition spéciale des forces électriques et magnétiques, permettant d'obtenir des réactions de répulsion et d'attraction suffisantes pour maintenir l'appareil suspendu, immobile, à une hauteur variant de 400 à 1.000 mètres durant plusieurs heures, quarante au plus. En cas de vent ne dépassant pas quatorze mètres à la seconde, l'appareil reste au même point. En cas de vent plus fort, il se meut dans une direction verticale, monte au-dessus du courant aérien, et reprend son immobilité.

Des expériences ont été faites qui ont déjà donné des résultats. D'autres vont être faites à Marseille même, avec un appareil ayant la forme d'un cigare, long de 4 mètres, avec 75 centimètres de diamètre, et du poids de 95 kilos ; il peut enlever 45 kilos, rester 24 heures dans l'air, se déplacer jusqu'à 200 kilomètres de son point de départ. On pourrait le faire aller de Marseille à Paris (653 kilomètres en ligne directe) en trois heures, et de Paris à Turin (585 kilomètres) en deux heures quarante.

Jules Verne In Action

Marseille, 13 September 1914

From the special correspondent of "*Le Matin*". Currently residing in our town an Italian Engineer has made an astounding discovery and that has resolved the problem of holding, absolutely immobile, a body in space.

Professor Louis Rota - that is his name - has invented an apparatus which triumphs over the law of gravitation and is able to hold immobile in the air at a height of five hundred, six hundred, indeed 1000 meters, a considerable weight.

It is possible to move this apparatus at a prodigious velocity in any direction and it may be stopped at any point all that, it is understood, without a mechanical motor of any sort, simply by using Hertzian waves.

The principle of this invention rests on the special partitioning of electrostatic and magnetic forces enabling forces of attraction and repulsion sufficient to maintain the apparatus suspended, immobile at a variable height of 400 to 1000 meters for many hours, forty or more. If the wind speed is less than 14 Km/second, the apparatus remains at the same point. In the case that the wind is stronger, the apparatus can rise higher above the wind and remain immobile.

Experiments have already been made which have already given results. The other has been made at Marseille with an apparatus in the form of a *cigar* 4 meters long and 75 cm diameter weighing 95 kilos. It can lift 45 Kilos and remain 24 hours in the air. It moved 200 Kilometers from its point of departure, and could go from Marseille to Paris (653 kilometers, in a direct line) in 3 hours and Paris to Turin (585 Kilometers, 363.5 mi.) in two and a quarter hours (=161.5 mph).

Louis Rota in front of his invention.

(Notice that is was prop driven for horizontal control.)

Unfortunately, we did not find any document related to this event, just this undated picture.

Rota's notes on the construction "The Aero Radio Ballistique, Type C"

Production of an Aircraft Insensible to Gravity and Air Resistance

numérotée I à IX

ETABLISSEMENT D'UN AVION INSENSIBLE A L'ACTION de la PESANTEUR .

-:-:-:-:-:-:-:-:-

Dans une note générale N° I, on a indiqué que les métaux renfermaient une énergie latente que l'on pouvait, à l'aide de certaine forces naturelles, réveiller et utiliser .

On a fait connaitre, en outre , que l'attraction de la Terre est due à l'action d'une force naturelle, qu'il a été possible également de contrôler et d'utiliser.

C'est cette force qui tient en équilibre les molécules des différents corps; son action conjuguée avec celle de plusieurs autres forces naturelles, assure leur cohésion .

Si donc on traite de manière convenable une masse métallique à l'aide de la force naturelle dénommée"attraction de la Terre on peut neutraliser ladite action sur la masse métallique en expérience, de sorte que celle-ci restera en équilibre dans l'air - Si on applique à cette masse une force plus grande que celle de l'attraction de la Terre, et directement opposée, la masse s'élèvera dans l'air - Si à l'aide d'un dispositif spécial on peut diminuer l'intensité de cette force, la masse descendra plus ou moins rapidement .

Tels sont les principes qui ont permis de réaliser des appareils volant insensibles à l'attraction de la Terre et présentant un certain nombre d'autres particularités avantageuses.

L'appareil type se compose essentiellement d'une cellule métallique renfermant le moteur et les passagers - on donne à cette cellule telle forme que l'on préfère, selon les usages auxquels l'appareil est destiné - les formes dites aérodynamiques n'ont aucune importance . Cette cellule est neutre, c'est-à-dire, que ses parties métalliques n'ont été soumises à aucun traitement particulier . Elle repose sur le sol au moyen de 4 roues , et porte à sa partie inférieure une sorte de plate-forme multimétallique munie de 4 pieds, qui peuvent entrer dans le sol. Cette plate-forme est constituée par des baguettes de métaux traités spécialement - la cellule est munie à sa partie inférieure d'un bloc multimétallique B traité, dont les connexions avec le poste de pilotage peuvent être coupées ou rétablies selon les besoins. . De même à la partie supérieure de la cellule, se trouve un bloc B, de composition différente de celui dont il vient d'être question, mais traité au moyen des mêmes énergies, et relié, comme il a été dit, au poste de pilotage .

L'action conjuguée de la plate-forme reliée à la terre, et du bloc B en contact avec la cellule, a pour conséquence le décollage de l'appareil . Cette opération s'opère par quelques mètres de roulement au sol ; elle est lente ou rapide au choix du pilote.

Dès que l'appareil s'est élevé de quelques mètres, la plate-forme est tirée et amarrée à la cellule ,le contact avec B est coupé ,et celui avec B' est établi. A partir de ce moment, la montée de l'appareil est verticale,rapide ou non,suivant que le pilote plus ou,moins l'action de B' par celle de B. , car si l'action de B' fait monter l'appareil,celle de B freine la descente aussi bien que la vitesse de l'appareil.

La cellule pouvant monter ou descendre,il reste à lui imprimer un mouvement de translation. Ce dernier lui est fourni par un moteur .

1°- On pourra utiliser tout d'abord un moteur à essence muni d'une hélice,comme dans les avions ordinaires.
Dans ce cas, l'appareil sera insensible à l'action de la pesanteur,mais les risques d'incendie seront les mêmes que dans un avion ordinaire.
Toutefois, l'énergie dégagée par les blocs B et B' crée autour de l'appareil une zône dans laquelle l'air est raréfié,de sorte que l'appareil n'aura pas à vaincre la résistance de l'air Il sera également insensible au vent et à la tempête ,de sorte que le moteur à essence,nécessaire à la propulsion de l'appareil,ne pourra avoir qu'une force très réduite.

2°- On pourra également utiliser un moteur particulier sans combustion,et n'employant aucune des énergies actuellement connues.
Son principe est extrêmement simple,et a été appliqué dans l'établissement de l'appareil qui,à la Station, sert à contrôler les courants .
Si dans un cylindre de cuivre,traité de manière particulière, on enfonce un autre cylindre de zinc convenablement traité,et ayant même axe, ce dernier cylindre se mettra à tourner d'autant plus rapidement qu'on l'enfoncera davantage .
Le mouvement de rotation ainsi,imprimé,servira à assurer le déplacement de l'appareil au moyen de

Le traitement des pièces métalliques du moteur se renouvellera au fur et à mesure du déplacement de l'appareil - sa vitesse peut atteindre 1000 kms. à l'heure.

L'action des courants naturels,qui à certaines époques causent sur des avions ordinaires des accidents souvent mortels, ne saurait être redoutée avec ce moteur .

En outre, le champ créé par l'énergie du moteur et des blocs dont il a été question,suffira à mettre en panne les moteurs à combustion des avions qui se trouveraient dans le voisinage de l'appareil (une dizaine de kms.environ)

Un tel appareil ne saurait être atteint par un projectile métallique envoyé soit par l'artillerie terrestre, soit par l'artillerie aérienne- le champ dont il vient d'être question, étant susceptible de modifier les trajectoires dendits projectiles.

REALISATION.

Suivant le résultat que l'on désire obtenir, et les fonds dont on dispose, on peut traiter le problème du véhicule aérien en trois étapes.

1ère Etape -

Prendre une cellule ordinaire d'avion (sans les ailes) traiter de manière convenable, à Mont St Aignan, les parties métalliques ;
on obtiendra un appareil ayant les caractéristiques suivantes :

a) suppression de l'attraction de la Terre.

b) suppression du coefficient K (résistance de l'air)

c) suppression de toute action perturbatrice extérieure -vent, tempête , etc ..)

d) suppression de tout danger de chute, pour quelque motif que ce soit, y compris l'arrêt du moteur .

On équipera cet appareil à l'aide d'un moteur de faible puissance, car il n'aura pas besoin, comme le moteur d'un avion ordinaire, de vaincre les résistances signalées plus haut .

Les chances d'incendie sont les mêmes que celles qui menacent un avion ordinaire.

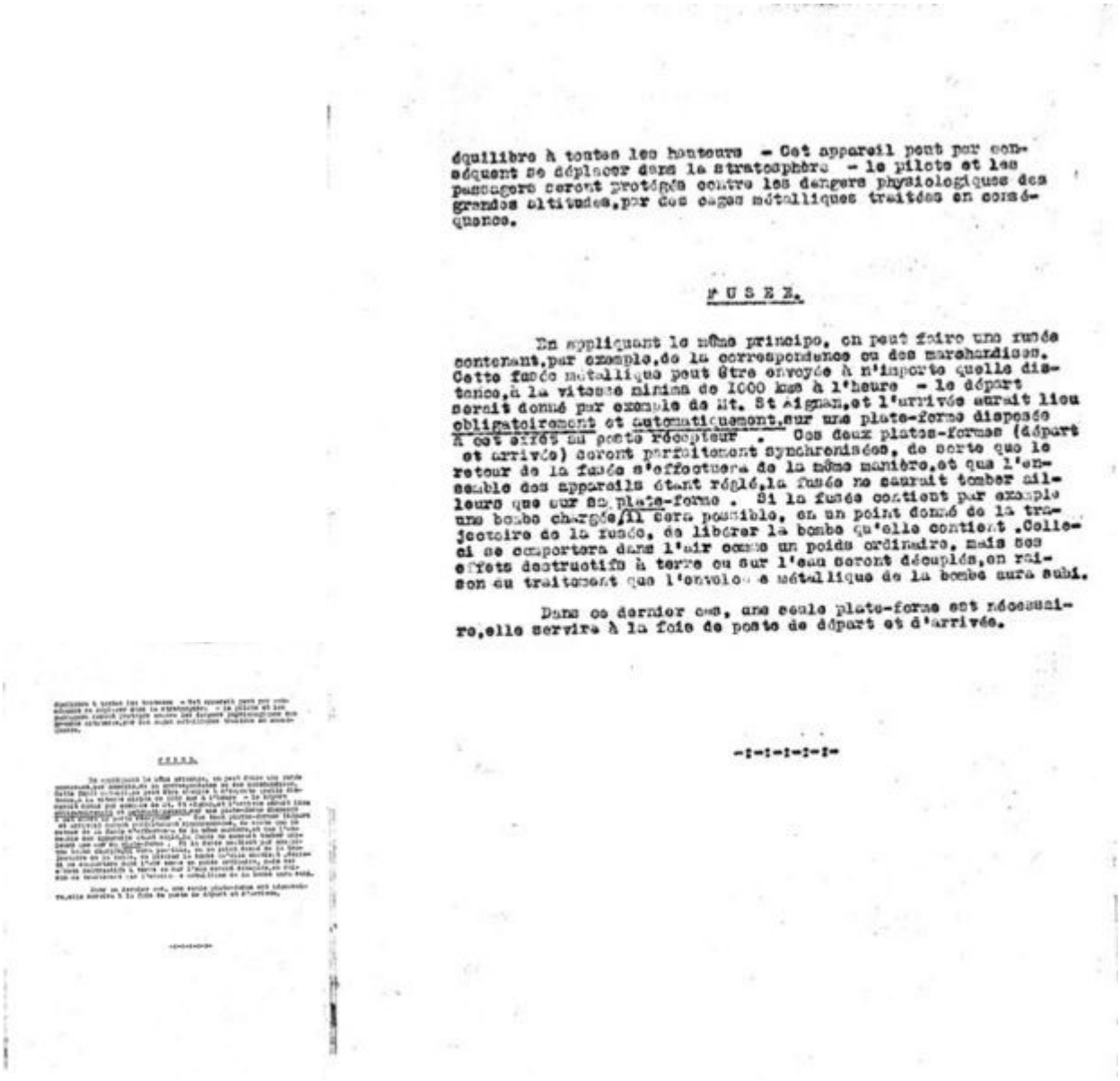
2ème Etape.

On supprimera le moteur à essence et l'hélice, et on les remplacera par un moteur sans combustion qui n'utilise aucune des énergies actuellement connues.

Dans ce type d'appareil, les chances d'incendie n'existent plus - on supprime le carburant, l'eau, et une grande partie de l'huile , par conséquent, il n'y a pas de limite à la durée des voyages effectués avec cet appareil.

3ème Etape.

On utilisera le même appareil dans lequel les parties métalliques sont traitées par des courants appropriés, de manière que les pressions intérieures et extérieures soient en



équilibre à toutes les hauteurs - Cet appareil peut par conséquent se déplacer dans la stratosphère - le pilote et les passagers seront protégés contre les dangers physiologiques des grandes altitudes, par des cages métalliques traitées en conséquence.

F U S E E.

En appliquant le même principe, on peut faire une fusée contenant, par exemple, de la correspondance ou des marchandises. Cette fusée métallique peut être envoyée à n'importe quelle distance, à la vitesse minima de 1000 kms à l'heure - le départ serait donné par exemple de St. St Aignan, et l'arrivée aurait lieu obligatoirement et automatiquement, sur une plate-forme disposée à cet effet au poste récepteur . Ces deux plates-formes (départ et arrivée) seront parfaitement synchronisées, de sorte que le retour de la fusée s'effectuera de la même manière, et que l'ensemble des appareils étant réglé, la fusée ne saurait tomber ailleurs que sur sa plate-forme . Si la fusée contient par exemple une bombe chargée, il sera possible, en un point donné de la trajectoire de la fusée, de libérer la bombe qu'elle contient . Celle-ci se comportera dans l'air comme un poids ordinaire, mais ses effets destructifs à terre ou sur l'eau seront décuplés, en raison du traitement que l'enveloppe métallique de la bombe aura subi.

Dans ce dernier cas, une seule plate-forme est nécessaire, elle servira à la fois de poste de départ et d'arrivée.

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page 4

Translation

In a previous note I have indicated that metals enclose a latent energy which can, with the aid of certain natural forces, be awakened and utilized.

I make it known furthermore, that the attraction of the earth is due to the action of a certain natural force which it has been possible equally to control and utilize.

This is the force that keeps in equilibrium the molecules of different bodies. Its action along with that of many other natural forces assures their cohesion.

If therefore a metallic mass is treated in a suitable manner with the aid of the natural force which we will call “attraction of the earth”, it is possible to neutralize the above mentioned action which the metallic mass experiences, in such a manner that the mass rests in equilibrium in the air. If one applies to said mass a force greater than the attraction of the earth in the opposite direction, the mass will rise in the air. If by means of a special apparatus one diminishes the intensity of said force, the mass will descend more or less rapidly.

Such are the principles which allow the realization of a flying device insensible to the action of the earth and also present a certain number of other advantages.

The apparatus is composed essentially of a closed metallic capsule containing a motor and passengers. The capsule can have any convenient shape, according to the use for which it is required. The form does not have to be aerodynamic, this is of no importance. This capsule is neutral, that is to say the metallic parts of it are not subject to particular treatment. It rests on the ground by means of four wheels and has on the lower part a type of multi-metallic platform carrying four feet which can enter into the ground. The platform is made of **metallic strips**, specially treated. The capsule is equipped, at its lower part with a treated **multi-metallic block B**, which has connections to the pilot's controls which can be made or broken as required. Similarly in the upper part of the capsule is placed another block B', which has a different composition to the other, but is treated with the same energies. It is connected to the pilot's controls which can be made or broken as required. The conjugate action of the platform connected to earth and the block B in contact with the capsule cause the apparatus to liftoff. This operation is assisted by rolling a few meters along the ground. It is slow or rapid depending on the choice of the pilot.

When the apparatus has risen some meters the platform is pulled up against the capsule, the contact with the block B is cut and remade to block B'. From this moment the apparatus rises vertically rapidly or not depending on the pilot balancing the action of block B against block B' because the action of B' makes the apparatus rise while that of B brakes the descent as well as the speed of the apparatus.

The capsule can rise or fall, but it still requires a means of producing forward motion. This is done by a motor (and propeller).

- A petrol engine and airscrew as in an ordinary aircraft can be used. In this case the aircraft will be weightless but the risk of fire is the same as in ordinary aircraft.

Nevertheless the energy liberated by blocks B and B' create about the apparatus a zone in which the air is rarefied, such that the apparatus will not have to act against air resistance. It will be equally insensitive to wind or storms so that the petrol engine used can be of very much reduced power.

- It is equally possible to utilize a special motor, which is without combustion, and does not use known energy. Its principle is extremely simple and is applied in the establishment of the apparatus which at the Station (at Mt St. Aignan, France) serves to control the currents.

If in a cylinder of **copper** treated in a special way and enclosing another cylinder of **zinc**, treated in a special way and mounted on the same axis, the latter cylinder will be caused to revolve more or less rapidly depending on the depth of penetration of one cylinder within the other. The rotation movement furthermore will serve to assure the movement of the apparatus by means of… [this part is missing from the originals text]

The treatment of the metallic pieces of the motor is renewed in proportion to the travel of the apparatus; the speed could be as much as 1000Km per hour.

Nature and detection of the Universal Currents

Presentation

In one of Rota's laboratory notes he says:

"At the start I thought that telluric currents were magnetic in nature and in consequence I conducted experiments into the concentration of electromagnetic waves of long wavelength using the earth as a collector".
Today, we would call this Extra/Very Low Frequency (E/V LF) electromagnetic waves, but as we shall this lead to something far more important.

Rota listening to the earth currents

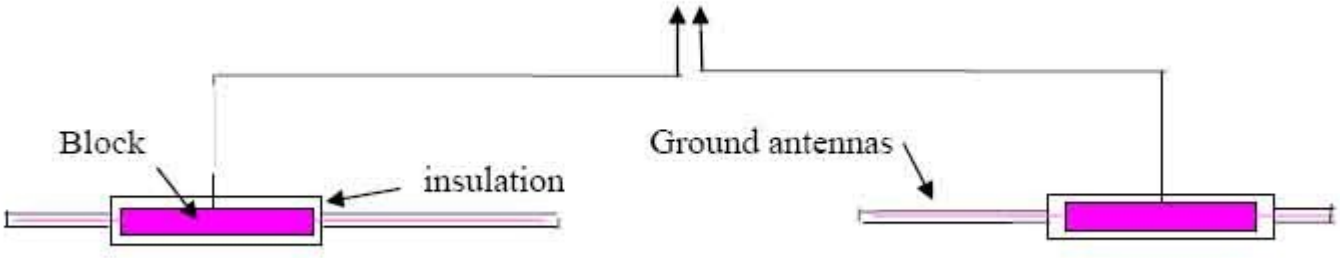
Before proceeding further into the nub of Rota's discovery, the Universal Current, needs explanation. Rota used headphones and a stop watch to detect the Universal currents (see picture). It is a purely physical process. Rota at first investigated telluric electric currents caused by induction from changes in the earth's magnetic field. In his notes Rota mentions the theory of Lord Kelvin (Sir William Thomson) that earth currents originate from the rotation of the earth in is non uniform N-S magnetic field. (The Magnetic north pole is not coincident with the rotational axis of the earth). Rota started From Lord Kelvin's idea that telluric or earth currents originate totally in the earth and were not external in origin. As mentioned above, earth currents caused disruption in early telegraphs which had a single wire mounted on poles and an earth return via buried metal plates. Rota set out to investigate the variations in telluric currents noted by telegraph operators to see if they were systematic in any way. He also noticed that ships in motion caused low frequency variations in potential on a metal cylinder immersed in water compared to one above the water. He extended this idea to aircraft detection and developed a special detection device which he subsequently patented (GB128624, GB129059, FR536324) that exploited this discovery.

At first Rota thought that aircraft and ships caused disturbances in the magnetic field of telluric currents which, in his view flowed continually in the earth, and these were detected by his patented apparatus, but sometime the end of the first world war he performed experiments on radio transmission through the earth. He discovered that in certain places the variations of signal between insulated grounded metal rods and insulated grounded wires of dissimilar metals separated by some distance showed different values depending on which metals were used for the metal pairs, furthermore he found that different metal pairs would simultaneously show different variations of signal. From these observations, he concluded that the electrical currents that he had transmitted through the earth had an "inner content" which was metal specific. In addition, he discovered that different metals transmitted signals through the earth better in some directions than others, and when the receiver antenna buried in the earth was the same metal as the transmitter reception was better. This gave him the idea that the radio signal was transmitted through the earth on a directional "emanation" which came from the metal, and furthermore this emanation was strongly influenced by the direction of the earth's magnetic field. At that time, powerful spark transmitters were still in use for radio communication. It is supposed he extended this idea to the natural telluric currents regarding them as being "metallic emanations" from deep in the earth carrying *electromagnetic* energy. This is something like ionization which will be discussed later.

Electrical potential as understood by Rota is a property its carrier agent and so should not be thought of simple thing in isolation but the property of a mixture of several components, the different metals separate this mixture being individually responsive to one component as distinct from another. Rota understood that these underlying component potentials revealed by different metals were more important than the just the overall electrical potential because the emanations from the metal rather like ionic streams could carry additional information. He found that emanations from the metals were not simple but consisted of a number of components which he called "Universal Currents" since one component or another could be found universally in nature and any mixture of them always are carried an electrical potential and flowed like an ionic electric current. However, the emanations from the metals seem to have more properties than the ions familiar to chemists although of a similar nature.

Earth Probes or Blocks

Analysis of Rota's apparatus allows us to gain an insight into its operation. Rota used deeply buried metallic probes to detect the earth potentials. These probes he called blocks. They were of a laminated multi-metallic construction (iron, tin, lead, zinc, cadmium, nickel etc.). The blocks were insulated from the surrounding soil so it is clear that he was interested in variation of potential which would couple capacitively/inductively into the probes or blocks rather than by direct conduction. (There is a possibility that the "ions" produced from the metals of the block could actually penetrate the varnish insulation, but the blocks I dug up showed no sign of corrosion despite having been buried over twenty years). However early blocks were probably not insulated from the soil. Extensive very thick cables (fig. 4) lead from the blocks into the laboratory. Two blocks separated by some 200 meters constituted an induction loop for the universal earth current(s).



Rota made the buried groups from laminations of different metals. The whole ensemble of metals formed a laminated metallic structure, which Rota called simply a "block". This block when buried would pick up all the current types in that locality. Other localities were found to have different current groupings, and for that given area a different block with different metals would be needed. (See Figs1, 2, 3)

The Blocks (Fig. 1) were buried in some cases at considerable depth. He was able to detect the telluric currents, using conventional galvanometers, headphones etc., but after he had made a crucial discovery the strength of the current detected instrumentally was dependent on the type of metal used in the block, the connection between the nature of the metal itself and the telluric current suggested itself. Investigating these telluric energies and sometime during this period, he found that for buried blocks close to each other but of different metals, one block would give a large output from the telluric energies and another adjacent block of a different metal would give little or no output. Also, on another occasion two adjacent blocks might be active and a third not etc. A block became in effect a means of tapping a specific group of currents in a given locality. To tap different current groups would require different metals within the block.

The output from these blocks then became substantially greater the more carefully they were adjusted in terms of amount of metal of one sort or another present in the block. Curiously the mass of a given metal is important. The different metals (as laminations) in a block have to match the telluric energy being detected for maximum output. Also as time went by the blocks grew in power without any intervention from outside. This "acclimatization" process took about *four years*.

Rota found that using a pair of phones he could hear the telluric currents which gave a characteristic note when connected to the blocks. Each block gave a different note or more correctly a characteristic tone, and also the note changed periodically over a period ranging from seconds to months. The periodicity meant that he could get the same tone from a given block after a known time. He then realized that there were many different sorts of telluric current, each giving its own sound in the headphones connected to a given block, and each fluctuating in a characteristic periodic manner. He later claimed to have found 361 different types of telluric current. All currents have a fixed and generally different direction in the earth. Their intensity and what Rota called their density changes but their direction is always fixed. The rise and fall of these parameters occurs at fixed times which enabled Rota to predict in advance when a given current was going to be active.

As previously mentioned, there is a connection between a given telluric current and a specific metal and when Rota experimented with blocks of single metals such as copper, zinc or iron etc he found that a given metal was responsive to more than one telluric current. However, the number of telluric currents detectable by common metals was relatively small. Thus copper is sensitive to four specific currents, zinc to six etc. Rota noted that the blocks gradually amplified the currents. This lead him to a very important discovery, I quote one of his documents:

"I have come to discover and prove how, in placing a metal of whatsoever kind in direct and suitable presence of its own intrinsic current which gave to the metal its origin one succeeds in awakening the latent energy of this metal and consequently to have at our disposal immense free energy *for all kinds of industry and its applications".*

If the metal buried in the ground emanates some sort of penetrating ions, then this claim is a natural consequence. The metal as the source would in time become used up.

We can see from this that the telluric current must be far more complex than electricity, in fact as we shall discover later electricity is, according to Rota, caused by the action of two telluric currents and magnetism by another three making five in all. Even gravitation has a current basis. These fascinating problems will be discussed below in more detail. These ideas are a departure from the metallic emanation view and he evidently thought that electrons were not all the same. Also, at some stage Rota decided that the telluric currents were not confined to the earth but originates from the cosmos and seems to play an important role in nature existing everywhere on earth including in living beings. For this reason he renamed the telluric currents he had detected, Universal Currents.

The difference between Universal Current and the Electric Current

One of Rota's laboratory notes says this regarding electricity:

"That which we call in physics Static Electricity *is an imponderable which results from the action of two natural energies; these latter form part of an ensemble of cosmic energies the existence and effects of which I have discovered. These two energies have their own specific properties but they are able to form a single energy when certain conditions are fulfilled; one sees an analogue between* natural electricity *and that produced empirically in the usual way.* Three natural currents*, different from the first two, give birth to an energy which goes under the name of* magnetism*. The result of these five energies working together is what we call* electromagnetism*. Thanks to intrinsic properties of each one of them, these currents can, according to the elements which they meet either in nature or dispersed by the hand of man produce effects at the present time not understood".*

This opens up the question as to whether electromagnetism is always the same as far as its constituent energies are concerned. For example if a battery is made using say zinc and copper in a suitable electrolyte connected by wires to a torch bulb and another battery using say iron and zinc are the constituent energies in the electric current the same in both cases? This of course is nothing to do with the volts and amps but would be to do with the "*inner structure*" of the electric current. If electricity has its origin externally and is cosmic in origin, then the "inner structure" is always the same. This view requires that the act of generating electricity is a process involving the attraction of an external energy; a specific group of universal currents. Rota's original telluric currents were very similar in behavior to a current of metallic ions. Whatever the origin of electricity, apparently the component universal currents do not act and react against one another. The self exchanging mechanism occurs only when the currents are active and so the currents may be regarded as static and inert. It will be seen later that these currents are active in living organisms and life is dependent on such an action and reaction. When this ceases death ensues, so it is clear that from this point of view electricity is dead.

In any case it is important to note that physical instruments are blind to the constituent universal currents in an electric current, instruments only detect volts and amps. Therefore two different groups of universal currents having the same voltage and the same current would be seen as identical by voltmeters and ammeters even if the constituents were different. The universal currents in an electric current may be chaotic; this is possibly why Rota said that the electric current is a *degradation* of its Universal Current components. When the metals involved in the production of an electric

current are “awakened” the electric current detected is the result of an action and reaction of the constituent currents in a coordinated way. This produces a characteristic tone which can be seen as a waveform on an oscilloscope or heard in a pair of headphones owing to the large fluctuations in potential as the various components synchronously add and subtract. The “awakening” is a harmonizing effect which Rota called Synchronization. The high potentials produced in this way caused the shock Rota received during his early experiments. An analogue to this process is an orchestra. If the members are playing at random there is just general noise, but if playing together in a coordinated way a tune is heard and also much louder impulses of sound.

To sum up, the difference between the universal current and the electric current is that the latter is a group of five component currents which are internally static that is they do not act and react whereas the universal currents dynamically act and react in a pulsating manner. A metal can be activated so that its components currents act and react. The awakening of a metal is a process called synchronization. Later it will be seen that living organisms carry universal currents which act and react on each other and when this exchange ceases the organism is dead. Electricity does not act and react and so by this standard it is dead. The universal current which does show this exchange may be thought of as “living electricity”.

Synchronization

Returning to the blocks Rota used, when a multi-metallic block is first buried, in the location appropriate to the metals the individual metals are dormant. In time the metals become active producing a coherent pulsing due to the action and reaction of the groups of currents of a given metal operating against each other giving that metal its characteristic tone. As mentioned above In order to hear this activity with headphones the metals have to be activated, they have to have their latent energy awakened. The tones from a block are due to the combined action of the currents of all the metals in the block; like an orchestra playing a tune. For example zinc with six currents gives a tone resulting from the sum of the six currents which constitute zinc. (This assumes the zinc metal is awakened by treatment with one or more of its intrinsic currents, otherwise the metal is inert). If zinc and copper were connected together the result would be the random ensemble of the 10 ten different currents, 4 for copper plus 6 for zinc. However, when combined in a buried block, over a period of time, the ensemble would meld into one single characteristic sound specific for that block and dependent on the metals constituting the block. This is the process of harmonizing Rota called synchronization. Accompanying synchronization Rota found an enormous increase in output energy from the block as all the impulses from the block pulse in an ordered manner. The pulsing produces a characteristic tone signature. Synchronization takes about *four years* to fully mature. It is not mass or volume dependent, 1 kg takes as long as 100 kg.

Synchronization eventually occurs in the laboratory equipment used with the currents. All the wires, galvanometers, voltmeters, ammeters and phones eventually become synchronized. If this is not done the "discord" drastically inhibits the flow of energy from the block. As mentioned above, common laboratory instruments such as voltmeters and ammeters cannot distinguish between an electric current and a universal current group. A common unsynchronized ammeter may measure a few milli Amperes from a block but a synchronized ammeter would read amps from the same block.

However, at this point it is worth bringing to light another even more curious fact. Rota maintained that the force which holds matter together at the atomic level was a force he called universal cohesion and also that gravitation which is proportional to mass, were caused by the same force. This force was one or a special group of Universal Currents. It seems that an element consists of a kind of knot of universal currents (four currents in the case of copper for example) bound together by the cohesive force current of universal cohesion or “gravitation”. Rota was well aware that gravitational force was, at the atomic level extremely minute, therefore, I infer that there must be two forms of gravitation. The second (bipolar?) form is enormously strong (because it is the cohesive force in matter) whilst the first monopolar form is a microscopic residue which only assumes significance in the case of large masses such as planets. He experimented with this second form in his antigravity machines, more on this later.

Problems in Detection Today

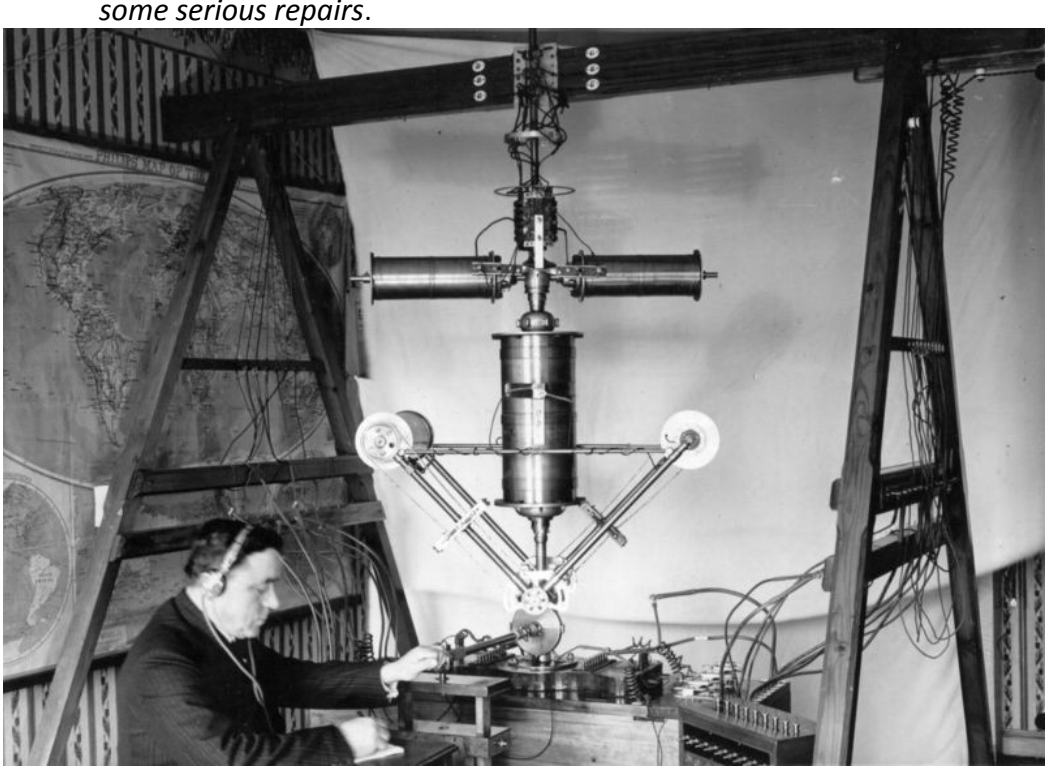
As will be seen in the patents quoted below any paramagnetic object in motion will produce a disturbance that can be detected by an ordinary electrometer. It appears today under the heading of ULF (Ultra Low Frequency). These disturbances are produced for example by cars and aircraft etc. Rota believed that these disturbances were due to an interaction between cars or aircraft etc. with telluric currents, that is, currents that flowed in the earth, but later came to the conclusion that these currents were cosmic or external in origin. This was a further reason why the telluric currents were renamed Universal currents.

Insulated buried probes will pick up a difference in potential if the disturbance in the universal current moves such that the probes are influenced unequally or if they consist of different metals. Initially, the metals pairs show only a very small potential variation but gradually the potentials start to increase as the almost dormant metals start to become active. It seems to have taken Rota many years to be sure of this effect.

To detect the universal currents unequivocally requires that the metal of the probe becomes activated as mentioned above. This needs the correct metal for the characteristic current of the place. If these do not match then the metal will never become active. It is also essential that no chemical action takes place between the metal probe and the ground so it must be well insulated and protected.

Universal Current Disturbance Direction Finder

- LGV Rota nicknamed this apparatus the "Cage à Moineau" (literally "sparrow cage") because listening to the Universal Currents with the headphones connected to this machine was like listening to bird songs, as if several birds were prisoners inside an unusual cage.
- Two models were built. The first one was destroyed during World War II. The second *one still exists but needs some serious repairs*.



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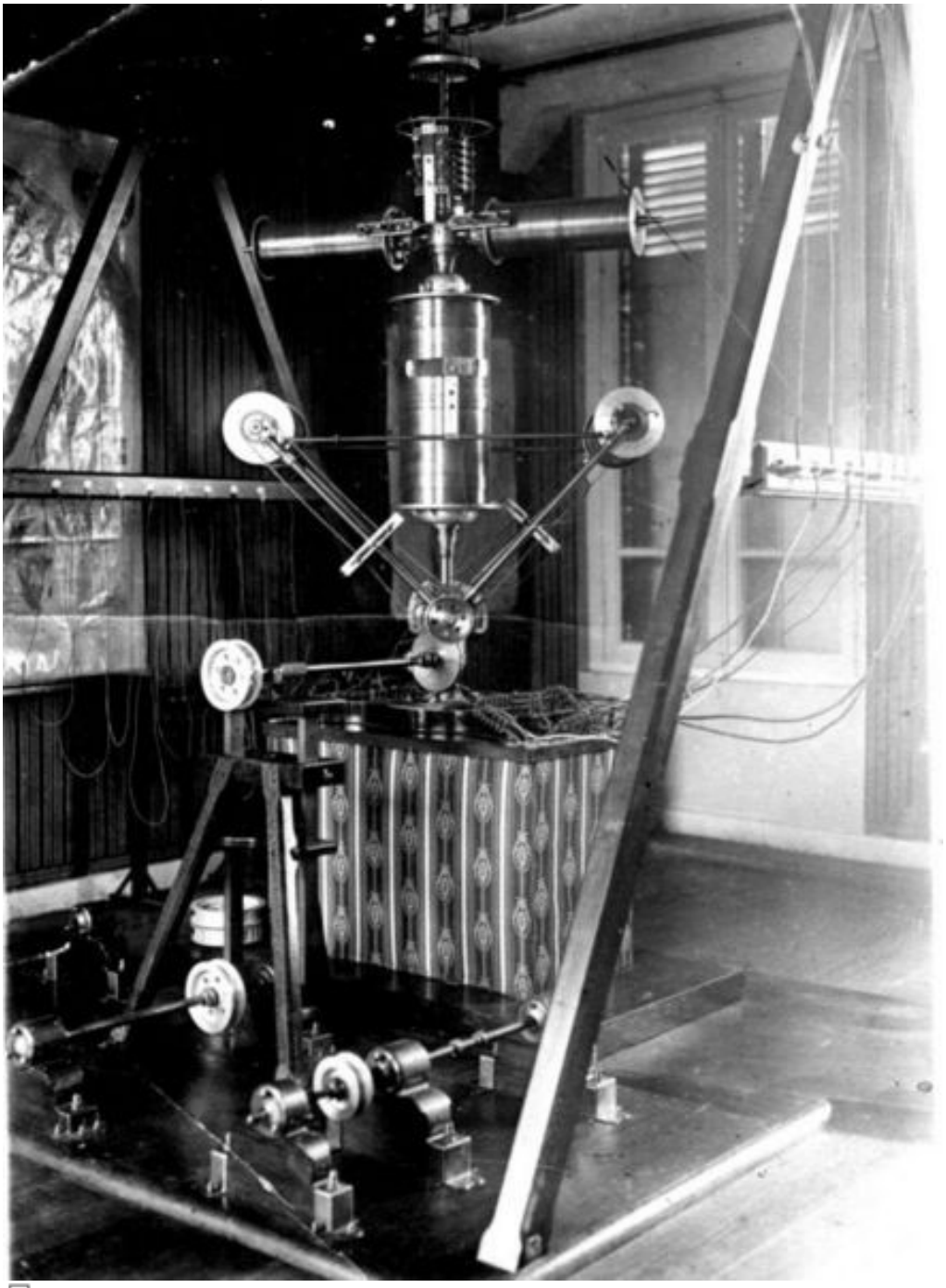
- 2 Description of The UCDDF by LGV Rota
- 3 See Also

How the UCDDF Works

Rota's notes contain a description of the operation of this device.
The principle of the location of aircraft or boats at a distance certain currents, are at the origin of *crystallization* of the earth and in the universe, each metallic element has been formed by the conjoined action of numerous natural currents, therefore each metal contains a quantity which when it is awakened become available.

The presence of a piece of metal whose energy has been awakened, produces in the field of one of the universal currents to which it owes its existence variations which can be observed. It has been found that a current develops a field 60 Km in diameter, its direction is constant but its other characteristics are variable.



1st UCDDF

These generalities being given and having noted the characteristics of the currents at different places in which aircraft fly it is possible to define at any moment at what distances they are, for example, of a point that an aircraft is seeking to reach. In the same way it is possible to determine the distance of a ship and more generally, of any metallic mass in movement.

A special apparatus exists (Cage à Moineaux) at the Installation at Mt. Saint Aignan near Rouen, France which enables research into all the currents to study their characteristics and record their actions and reactions one upon the other. It is movable in a graduated circle and can be directed to all points on the horizon.

The complement of the apparatus is a phone treated with the appropriate currents to increase the sensitivity. The phone is connected by a wire to the apparatus.

When the apparatus A points in a given direction it intercepts a current C, the operator hears in the phone a particular auditory reaction R. If a metallic mass M, an aircraft for example, enters the field of C, the reaction heard differs R' different to R.

When by trial and error a clear and maximum of response and is heard, the apparatus points in the direction of M.
The angle which that direction makes with respect to the horizontal AH is given by the apparatus and in resolving the triangle AMH the distance which separates the apparatus from the aircraft is given".

Description of the UCDDF by LGV Rota

(Translated from the original document by Mike Watson)

Universal Current Disturbance Direction Finder

Apparatus permitting, (starting from a place where the velocity with respect to the earth is finite or zero), to locate, in the air, underground or under water fixed or mobile metallic masses.

Louis Rota

The present invention refers to an apparatus permitting with respect to a place where the velocity is finite or zero, to locate, in the air, underground or under water fixed or mobile metallic masses. This apparatus aims to reveal the perturbations that result from the presence of a metallic mass entering the fields of force produced by telluric currents. That effect, these perturbations are generators of differences in potential which are produced on the surfaces of pairs of insulated metallic cylinders. These cylinders are displaceable so that they rotate about their own axis and also may be moved relative to a system of sensors or probes conveniently placed around the place of observation the observatory.

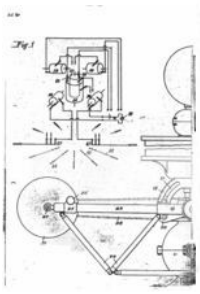
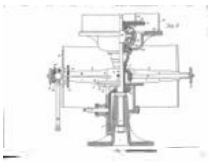


Fig. 1



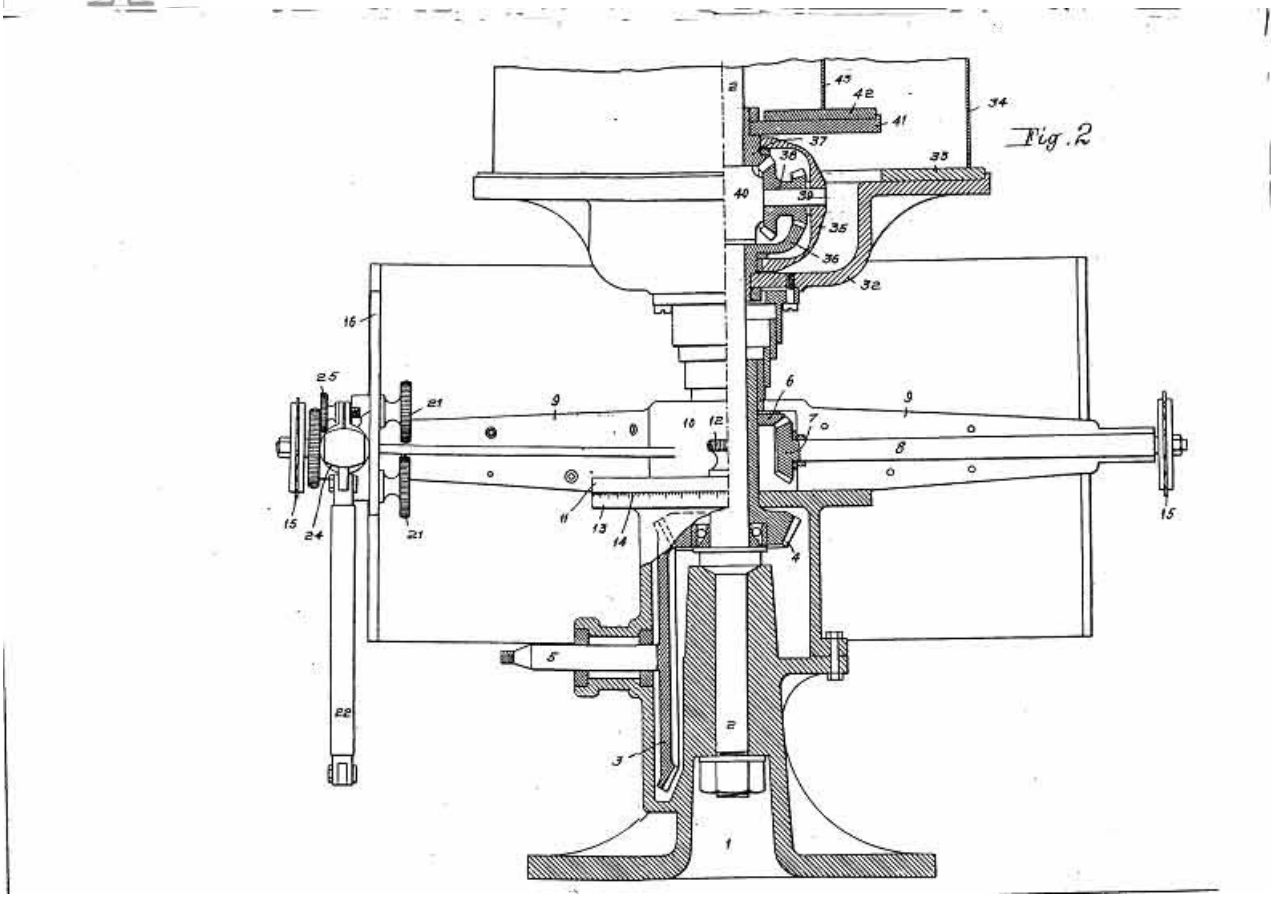
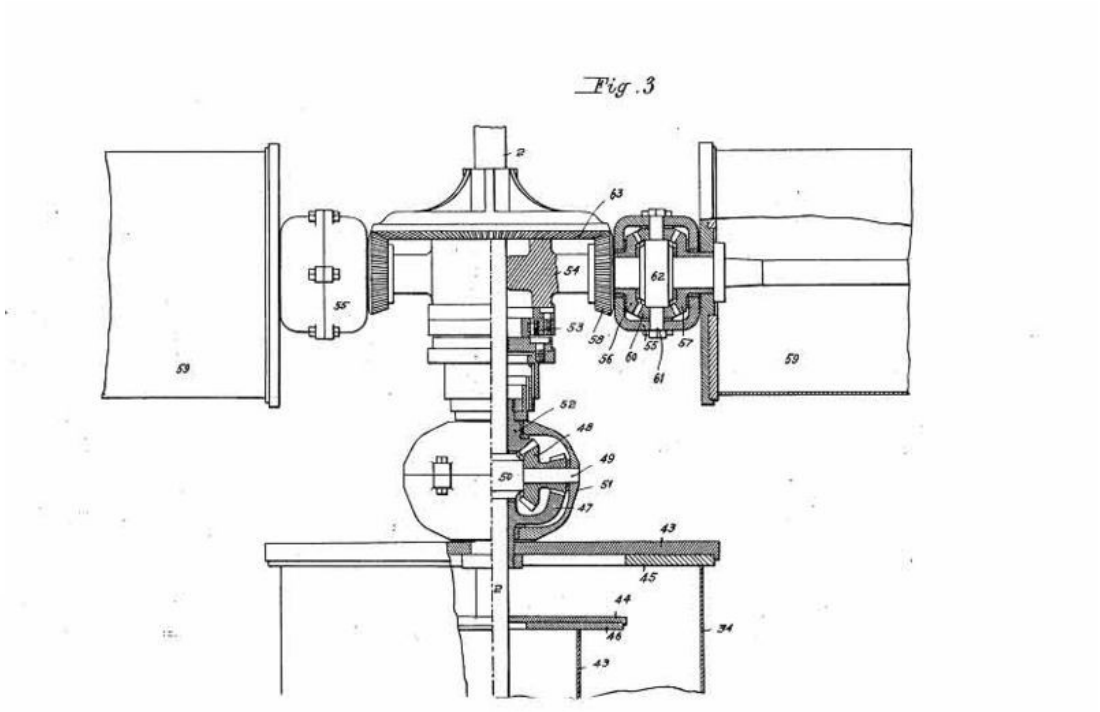


Fig. 2



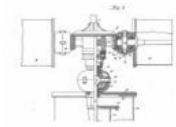


Fig. 3

The drawings attached are a typical example:

- **Figure 1** is a schematic view of the installation which utilizes the apparatus which is the object of the present invention.
- **Figure 2 and 3** are views of the lower and upper parts of the apparatus partly in elevation and partly as a vertical cut.
- **The view 4** is a lateral view of the mechanical assembly.

In the form representing a typical example, the apparatus consists of a base 1 in which is fixed a vertical rod 2. The hollow base 1 contains beveled toothed wheels 3 and 4 which receive movement from the exterior by means of shaft 5 which is mounted on ball bearings. The pinion 4 of the said couple above it another conical pinion 6 which transmits the angular displacement in the opposite direction to the two pinions 7 on the two horizontal axes which extend either side as a prolongation of one another. The shafts 8 which carry the each of the pinions 7 are mounted in the diametric arms 9 by means of a hub10 and a casing in two parts. This hub 10 carries a horizontal 16 plate 11 in which are cut slots in the form of an arc. In these slots are engaged the screw 12 which is screwed into the table 13 which is part of the base 1 on which the plate 11 slides along the angular displacements of the casing. The graduations 14 allow the exact value of the displacement. The shafts 8 have at their extremities two chain pinions15.which we find issuing out of the arms of the casing. At the extremity of the arms 9 is mounted a vertical plate 6 carrying in its vertical plane of symmetry a slot 17 in the form of an arc with corresponding graduations 18. On the hub two extension bearers 19 are mounted. Each bearer is terminated by an eye, the one carries three slots and the other made in such a manner that it acts like a sliding clamp. The bearers 19 and ear 20 allow upward movement of:

- a) The screw 21, which allows engagement with the slot 17 in the plate 16,
- b) The end of one of the trapezium frame 22.

Each bearer 19 receives tube 23 and at its other extremity a clamp 24 holds a position that is secured by screw 25. The clamp 24 can act as a chain 26 tensioner and carries at one part the linkage for the branch of the support corresponding to 22, the other part an axle 27 has at its other remaining extremity a chain pinion 28 and on which is respectively fixed a completely closed hollow metallic cylinder 30. The trapezium frame 22 is correspondingly connected with a telescopic rod 31. The pinion 4 on the vertical axis acts via its vertical stack on a casting 32 which carries the lower annular insulating ring 33, in turn supporting the walls of the vertical cylinder34. In that casting 32 is housed the epicyclic gear group. In the bosses corresponding to that of the casing 35 and on the vertical fixed rod 2, rotate two opposed conical pinions 36, 37 of different diameters. Each of them engages with the teeth of the double satellite 38 which turns about the axis 39, which carries a central hub 40 and on also on the other side the casing 35. The upper conical planetary pinion 37 is attached to the plate 41 which also carries the insulating plate 42 which in turn is attached to the lower end wall of a cylinder 43 concentric to cylinder 34. 44 carries the insulating plates 45, 46 which close its opposite extremities.

The upper plate 43 of the external cylinder 34 is attached to the lower planetary 47 of one of the upper epicyclic train similar to that already described, with the exception that in this case the planetary gear is of greater diameter than the previous one placed at the bottom of the train. The double satellites 48 turn on their axes 49 which carry the central hub 50 and the casing 51. The other planetary 52 similar to the latter entrains by means of spacer 53 the gear housing 54 in such a manner that it turns to the left. Each of the arms of this structure is driven by the conical pinion differential 55 and planetary gears 56,57 turning on the aforesaid arms carry in one case the pinion 58 and in the other case a metallic cylinder 59 closed by insulating plates. The satellites 60 are mounted on the axes 61 belonging to the central hub 62 and it engages in the casing 55. The pinions 58 enmesh with the same wheel 63 well fixed to the vertical axis 2. By these methods, when one acts on the exterior command device one provokes by means of the conical gear couple 3, 4 the following results:

1. The displacement in opposite directions of pinions 7, rod 8 and the chain pinions 15 chain 26 and pinion 28 results in angular displacement in the opposite direction of the cylinders 30 about their horizontal axis 27 which both have.
2. The concentric cylinders 34, 43 have movement in the opposite direction and have different speeds about their vertical axis due to the planetary gears 36,37 in the lower epicyclic gear train.

3. Displacement in the opposite sense and with a different speed of rotation of the upper left [hub] 54 by the vertical exterior cylinder 34, is produced by the drive for cylinders by [casing] 51 which carries [54] turns to the left and makes the axles of cylinders [59] move in a horizontal plane.
4. Displacements about their respective axes of cylinders 59 is the consequence of the rotation of pinions 58 on the gear 63 fixed to the vertical shaft 2; the angular speed in opposite directions of the cylinders 59 are de-multiples of the differential coupling 55.

In addition and closely related to these automatic displacements are the lower horizontal cylinders 30 that can receive:

- An angular displacement of their whole assembly about their vertical axis 30, such that the acxes of the cylinders move in the horizontal plane.
- An angular displacement of the supports 23 of the vertical axis 27 of each cylinder 30 about the horizontal axis of the frame 8 that carries pinions 15, such that the axes of the cylinders 30 can, independent of one another, be placed at different heights in the same horizontal plane. The change in position of the horizontal cylinders 30 has no effect regarding the angular rotation that they receive about their respective axes arising from the drive shaft 5.

From the point of view of the installation and interconnections, the apparatus is set up as in Fig1 about the vertical axis 2 which is considered as the origin around which are placed the probes or sondes (or probes) 64 either aerial terrestrial or aquatic. The probes or sondes (or probes) are placed symmetrically and diametrically around the apparatus origin. These probes or sondes (or probes) are made of cylinders open or closed non corrodible and not attacked by sea water etc. these sondes (or probes) are connected by means of conductors 65 to a fixed connector 66, with their being put alternately in contact with the pairs of slip rings 67, each pair is connected by means of cables traversing the support frame of the apparatus and the slip rings both the external or internal surface of the horizontal cylinders 30 and 59 and both the external or internal surfaces of the coaxial cylinders 34,43. The other brush such as 68 in contact with the internal or external surface of the said cylinders are connected by means of conductors to the brushes supported on the collector rings fixed on the extremity of the vertical support of the apparatus. The other brushes and rings are also in contact in such a way as to utilize two by two to form a circuit which is connected to a measurement apparatus, visual (voltmeter for example) or sound (or probes) (headphones 69 with an amplifying circuit if needed).

If one of these circuits (circuit of the lower cylinders 30 for example) is considered, it is seen in the course of the angular displacement of the apparatus the brushes slide on the contacts of the collectors 66 of the exploration probes or sondes 64. The circuit passes by means of the external surfaces of the cylinders, through the upper collector-slip rings. From there the brushes ensure closure of the measuring circuit permitting the detector to measure the variations of the telluric currents on the bodies of the cylinders when the latter are displaced across the vertical plane defined by the diametrically opposed exploratory probes or sondes 64. It is possible to also recognize the perturbations which occur in the telluric currents when at a distance the field of lines of force is disturbed by the passage or presence of a metallic mass, for example, mass which introduces a heterogeneity into the homogeneity of the said field.

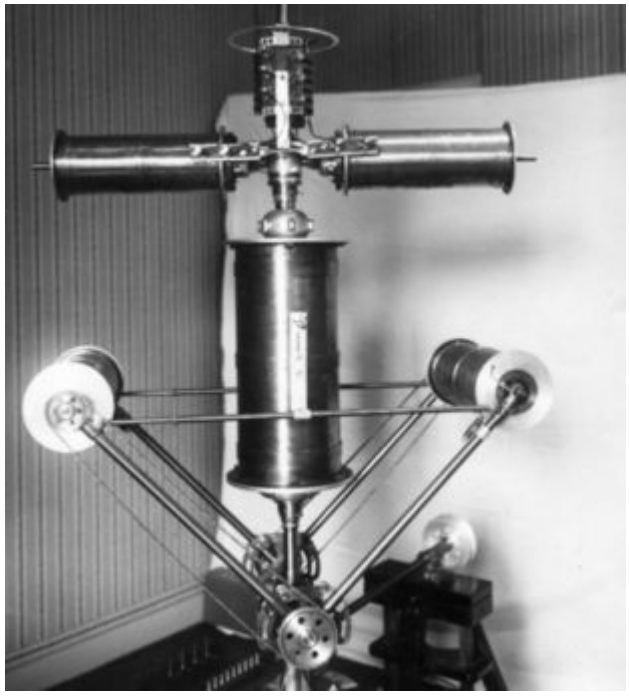
The angular displacement of the lower horizontal cylinders 30 which allows a variation in the height of their axes above the fixed horizontal plane, serving to realize views in different fixed horizontal planes, which allows verification in altitude or depth of the mass which disturbs the telluric field.

The cylinders utilized are of pure metal, non magnetic, such as copper, silver, zinc, etc.. They can be of one single metal, either being constituted of cylinders fitting into each other or of different metals. These cylinders can in the latter case be pierced by windows allowing the appearance of the surface of the cylinder which is double. One can obtain an equivalent result by soldering longitudinal metallic bands or a ring on the cylinder in a different metal to that of the cylinder.

RESUME

Apparatus permitting, (starting from a place where the velocity with respect to the earth is finite or zero), to locate, in the air, underground or under water fixed or mobile metallic masses…

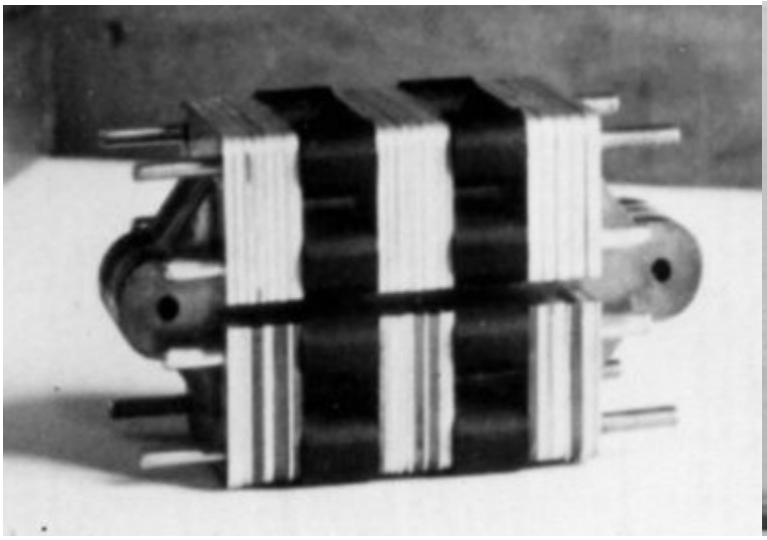
- the presence and the position of metallic masses in the controlled space are determined by the difference in potential engendered between the metallic surfaces of pairs of insulated cylinders, the cylinders being in effect mobile in rotation; in the one part about their own axis and in the other part relative to a system of probes or sondes; the latter being conveniently located about the place of observation and in the controlled space such as to be influenced by perturbations which the telluric field undergoes due to the presence of metallic masses.
- The detector is constructed in the following manner:
    1. Two coaxially mounted insulated cylinders separated by an air gap and capable of being rotated on their axis in opposite directions and different velocity about a common axis.
    2. Two horizontal cylinders having the same axis but mounted either side of the vertical cylinders. These cylinders which can turn about their common axis can also receive a movement of gyration about the vertical axis.
    3. Two horizontal cylinders with their axes parallel either side of the vertical cylinders, these cylinders which can turn about their respective axis and at the same time about the vertical axis, they also can be placed at different heights by angular adjustment of their supporting frame.
- The cylinders of each part can be put in contact, by their exterior surfaces, for example with the extreme radially opposed probes or sondes spread out in space, aerial, subterranean or aquatic. The interior surfaces of the cylinders of which the metal from which it is constructed can be different from that of the exterior part is connected via brushes to a detecting apparatus such as headphones or a visual instrument.
- A control mechanism produces the following simultaneous actions:
    1. By means of an epicyclic gear chain a rotation in opposite directions and of different velocities of two vertical cylinders about their axis.
    2. Opposite rotations about their axes of two horizontal cylinders, their axes being parallel.
    3. Rotation by through the intermediary of one of the vertical cylinders, of an epicyclic gear chain and, if it is necessary to the horizontal axis on which the two upper cylinders are mounted in a prolongation one of the other and of the vertical axis. These cylinders receive equal angular velocities in the opposite direction about their common axis.
- The parallel axes of the lower horizontal cylinders are carried by an adjustable system allowing the adjustment of the axes to variable heights with respect to the horizontal reference plane. The whole assembly can be rotated about the vertical axis of the vertical cylinders. Graduated scales allows measurement of the value in both the vertical and horizontal plane.



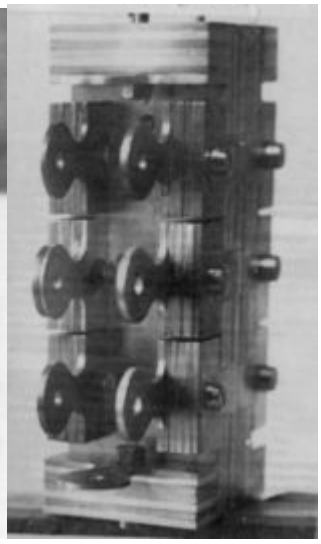
Rota's Lamps

- 1 Blocks used to power the Rota's lamps
- 2 Description for the Construction of Lamps (by L.G.V Rota 8.9.1938)
  - 2.1 First Lamp
  - 2.2 Second Lamp
  - 2.3 Third lamp
  - 2.4 The fourth Lamp

Blocks used to power the Rota's lamps



Block NPR



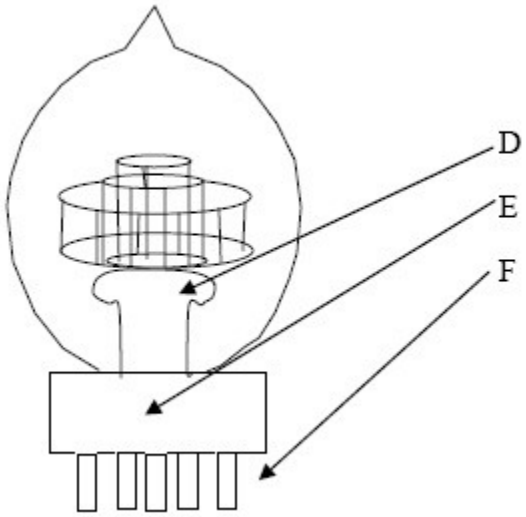
Block SPR

Block NPR on end

Description for the Construction of Lamps (by L.G.V Rota 8.9.1938)

1. The dimensions of the lamps upon the designs is the natural size, I consider if the manufacturer keeps a standard size more than 3 or 4 mm that is of no importance as long as it is not smaller.
2. All measurements are shown in millimeters.
3. In all the lamps, the wire strips exceed 100mm as indicated in the design, a fact which is necessary for connecting them to their blocks.
4. All the wires and strips must be supported or secured by means a fastening in pure glass D, then next by the base cup E of the lamp[assign through into pins F (see figure below insulated in glass. These pins are secured into ebonite or other neutral material, as is common in the making of lamps.
5. All filaments must be the purest possible, and in filaments molded in alloy on can maintain the ordinary proportions., only afterwards I must be informed of the specification of the alloy content of each metal.

6. Of each kind of filament or strip used, there must be reserved for me a piece of each quality, may be 30cm of platinum and 40cms of each of the others.
7. The diameter of the filaments or strips, and the size of the pastilles are given for each lamp in the explanation.
8. For each wire is given its composition, and its position is indicated in the drawings
9. a general recapitulation is made of the wire used, the number and quality for each lamp.
10. All lamps must contain 2 gases Krypton and neon, in equal proportions at a pressure of 0.6 atmospheres.
11. I wish to have :
    - (a) 3 lamps of the first lamp
    - (b) 3 lamps of the second
    - (c) 4 lamps of the third
    - (d) 5 lamps of the sixth D E F



First Lamp - Powered by Block NPR

A 3 wires	wire 1 Ag	wire 1 Cu	wire 1 Zn
B 3 wires	Wire 2 Ag-Pb	wire 2 Cd-Pb	wire 2 Zn-Pb
C 3 wires	Wire 3 Au-Cu	wire 3 Au-Ag	wire 3 Au-Cd All soldered to circle 3 or concentric to the first on inner circle A (Ag)
D 2 wires	wire 4 Au-Cu-Ag	wire 4 W platinum pastille soldered thereon	
E 3 circular wires for A,B,C	Ag	Pt	Ag
F Platinum pastille on the central wires soldered thereon			

- The diameter of the eleven vertical wires is 0.5 mm length > 100mm
- The diameter of the horizontal wire is on circles A, B, C is between 0.35 and 0.4 mm.
- The Platinum pastille soldered to the two wires 4 and 5 is 6mm diameter and 0.3 mm thick.
- The wires 4 and 5 are insulated and independent of the other vertical and horizontal wires and at the center of the latter. If these two wires are needed to be secured, the must not touch beneath each frame the other wires vertical and horizontal.

Second Lamp - Powered by block SPR

G 3 wires Soldered to circle D Wire 4 AG Wire 5 cu Wire 6 AG
H 1 wire Single wire Pt

I 2 central wires	Wire 2 Cu	Wire 3 W
J 1 circular wire	Au-Cu-Ag (alloy)	
K 1 large pastille	Soldered to wires 2 and 3	

The 5 vertical wire diameters 0.5 mm

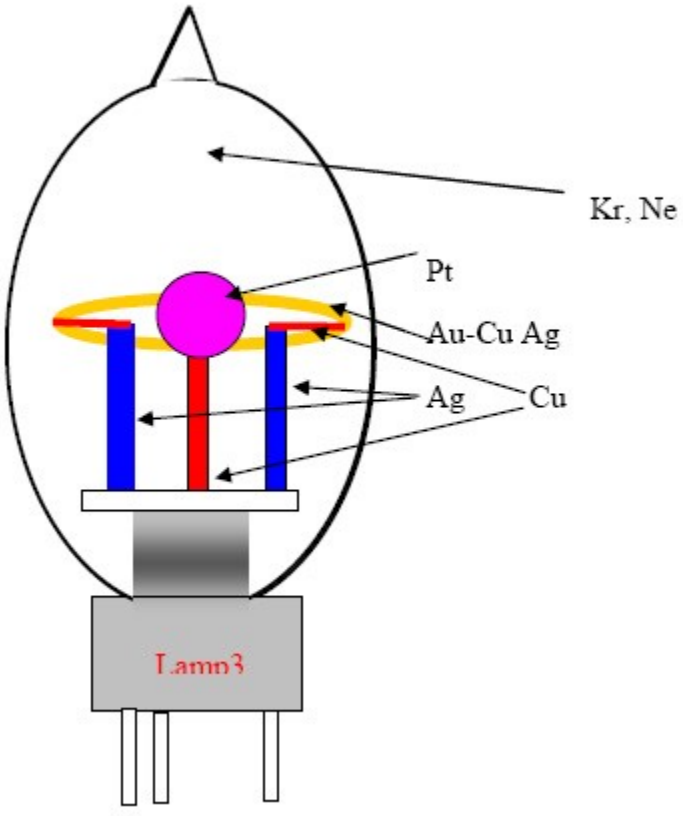
- The single vertical wire in platinum perhaps 0.35-0.4mm
- The circular wire , horizontal diameter 0.5 mm
- The platinum pastille 0.3 mm thickness, 10mm diameter
- Wire 2 and 3 are insulated and independent of the other wires, vertical and horizontal. If it is necessary to secure these two wires, they must not touch under each frame, the vertical and horizontal wires.

Third lamp - Also powered by block SPR

L 3 strips	strip 1 Ag	strip 2 Cu	Strip3 Ag
M 1 wire circle	Au-Cu-Ag		
N 1 pastille	Pt		

- The 3 strips breadth 4 mm thickness 0.35-0.4 mm
- The wire circle A joined to the two Ag strips as shown in the diagram by means of a copper wire 0.5mm in diameter.
- The strip 2 Cu is insulated and independent of the others Ag 1 and Ag 3 and the circle wire A. Also it carries platinum pastille N.
- This platinum pastille measures 6 mm diameter and 0.3 mm thick.
- If this strip Cu2 has to be secured it must not touch under any frame the other strips nor the horizontal wire \a.
- In the above three lamps, the platinum pastille are at the centre of the wires horizontal and vertical as shown in the diagrams.

The fourth Lamp



- lamp 3 wire vertical Zn Fe Cu
- Their diameter is 2.5 mm placed in parallel, the Fe is in the middle

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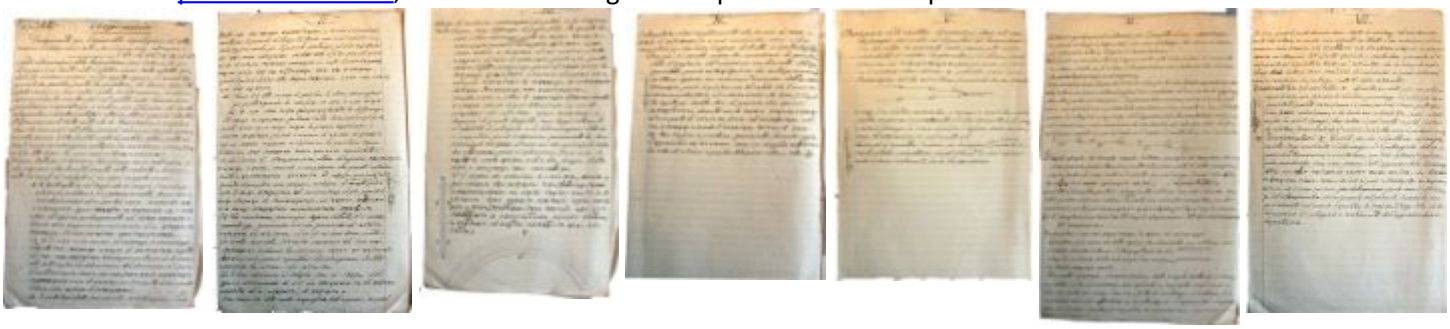
Submarine Document

- 1 The document
- 2 The translation
  - 2.1 Page 1
  - 2.2 Page 2
  - 2.3 Page 3
  - 2.4 Page 4
  - 2.5 Page 5
  - 2.6 Page 6
  - 2.7 Page 7
- 3 The Code

The document

This seven page manuscript was written in 1917 by Louis Rota. A first glance, it looks to be a detailed operator guide related to the patent GB129059 , but in fact it brings more questions than responses….

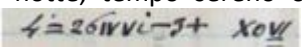
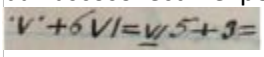
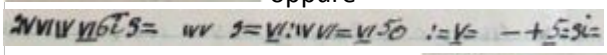
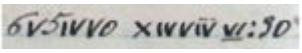
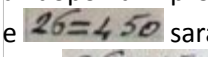
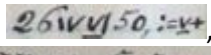
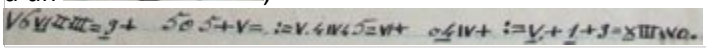
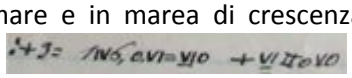
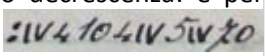
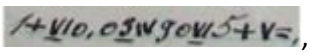
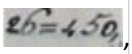
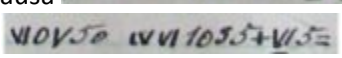
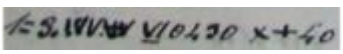
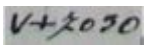
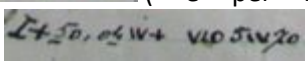
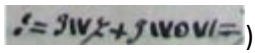


The translation

This is a very poor word-to-word translation from Italian to French. We hope that somebody will show mercy and help us to correct the many mistakes, as well as to decipher some wording of the manuscript (noted (..?)). The XXXX as well as the numbers (ex (24),(25) replace expressions that are not yet associated to an image. They represent the setting (or current name?) of the detector.

Page 1

Italian	French
Compimento per l'azione della segnalazione dei sottomarini a distanze varie = tanto a fior d'acqua come nell'acqua=	Complément pour la détection des sous-marins à distances diverses tant en surface qu'en plongée.
Nella determinazione della trasmissione (come direttamente per la ricezione) va tento conto d'effetti e cause tutto affatto speciali, che nessuno ancora ne fece oggetto, oppure si sorvola leggermente su qualche punto la questione, che hanno già (detti affetti e cause) un buon valore nella T.S.F comune, se venissero considerati;	Dans la détermination de l'émission (comme la réception) il faut tenir compte d'effets et causes particuliers qui n'ont 'a pas encore fait l'objet d'études, ou sont considérés très superficiellement comme une propriété de T.S.F. ordinaire.
mentre poi nel nostro caso hanno una grandissima importanza e valore per il lavoro che volsi intraprendere e direttamente per ottenere ottimi e precisi risultati.	Cependant, dans notre cas j'obtiens directement des résultats optimum et précis d'une très grande importance pour nos recherches.
(Tenendo,avanti tutto,conto che la trasmissione e ricezione viene da una mare all'altro, quindi submare, noi già	(Retenons, avant tout, que la transmission et la réception mer - mer, facilite beaucoup la portée comme pour les ondes

conosciamo nella comune T.S.F, facilita molto la portata, sebbene questo sia cosa di minore considerazione,molto più da considerare invece, quando si fa detto lavoro tra una nave e terra e viceversa)	radio. Cette considération est mineure en mer, mais devient plus importante dans les travaux réalisés entre un bateau et la terre)
Dunque, tanto per il lavoro a fiore d'acqua come nell'acqua si deve osservare attentamente quanto sotto indicato e tenere conto dei modi di risoluzioni in ogni singolo caso.	Donc, aussi bien pour le travail en en surface qu'en plongée, on doit observer attentivement les baisses de valeurs et tenir compte des modalités de résolution dans chaque cas.
Va tenuto conto se nel tempo che si compie l'esperienze (o lavoro in questione) sé giorno o notte, tempo sereno o burrascoso ect.. e per tale causa   oppure  e fare all'uopo un prolungamento nel  e  sarà sempre in un minimum d'un  , 	Il doit être tenu compte si l'expérience (ou le travail en question) est réalisée de jour ou de nuit, par temps calme ou agité, etc. .. Pour cette raison, (1) (2) ou bien(3) fera au besoin une prolongation dans le (4) et (5)sera toujours dans un minimum d'un (6)(7)
Se il mare e in marea di crescenza o decrescenza: e per questo  al  rispetto al suo  ,  , puramente, perché la marea oltre tutti i motivi che determinano tale fenomeno, n'è pure il motivo o causa  ,   d i  (e per il momento lascio a parte il  di )	Si la mer est en marée montante ou descendante et pour cela (8)au (9) par rapport à son (10), (11), simplement parce que la marée parmi toutes les raisons qui déterminent un tel phénomène, n'est pas le seul motif ou cause : (12), (13) (14)de(15) (et pour l'instant je laisse de coté le (16) de (17))

Page 2

Italian	**French**
In questo terzo effetto veniamo alla considerazione d'un (18) e se ciò è massimamente per le grandi distanze, tuttavia non e di minore considerazione anche per le piccole distanze perciò (19) quindi si ora il (20) in modo d'avere (21) perciò il primo cilindro della stazione (22)	Dans ce troisième effet nous considérerons un (18); s'il est d'une extrême importance pour les grandes distances, it n'est toutefois pas de mineure considération même pour les petites distances donc (19); on aura de ce fait le (20) en mode de reception (21)donc le premier cylindre de la station (22) (?????)
Come s'é detto (23) si può fare le stesse osservazioni per quanto riguarda la (24) dedotta la differenza del (25), partendo dalla base, (o principio) che questi siano con o senza (26) la propria (27), quindi s'arriane (?) di (28) di (29) con o (30)si definirà la questione come l'avere un (31)sopraccitato; se poi invece e (32), allora bisognerà (33), venendo a considerare che questi influisce molto a (34) ed (35), quindi si guarda di prendere ma posizione ambigua ed (36) il (37) del (38) al più possibile (39) di (40), ed (41) il (42) del (43) al più possibile (44) di (45), ed (46)	Comme je l'ai dit (23) on peut faire les mêmes observations en ce qui concerne la (24)déduite de la différence du (25), en partant de la de base, (ou du principe) que ceux-ci soient avec ou sans (26) son propre (27), donc ??s'arriane??de (28) de (29) avec (30) se posera la question comment avoir un (31) déjà cité; si ensuite par contre on a (32), alors il faudra (33), en venant à considérer que ceux-ci influent beaucoup le (34) et (35), donc on se regardera de prendre une position ambiguë et (36)le (37) du (38)au plus possible (39) de (40) et de (41) le (42) du (43) probablement (44) de (45) et de (46)
Sui medesimi principi sopra citati n'è una uguaglianza quando sé in periodo di (47), ed in ciò si deve tener conto	Avec les mêmes principes cités plus haut, il y a une égalité quand il s'agit d'une période de (47) et dans cela on doit

che questi sono della (48) del (49) ed hanno (51); credo perciò superfluo il prolungarmi, basta osservare la (52)	tenir compte que ceux-ci sont du (48) du (49); je crois donc qu'il est superflu me m'étendre, il suffit d'observer la (52)

Page 3

Italian	**French**
E bene osservare i (53) ove si (54) se sé in (55) di (56) od in (57), di (58). Ora come si detto sulla superficie dell'acqua si posso definire le medesime osservazioni (per gioendo ?) si fa l'azione dentro l'acqua senza differenza di profondità. Per questo la vero e bene osservare molto (59) quindi (60) il (61) nel suo massimo e tutto (62) nel (63); perciò si fa presto dedurre l'effetto e conseguenze, perciò nel (62) e viceversa nel (63) e in più (64) la (65) dei (66) tutto(67).	Et bien observer (53) où (54) s'il est dans (55) de (56) ou dans (57) de (58). Maintenant je dis que sur la superface de l'eau on peux définir les mêmes observations (pour gioendo ?) on fait l'action dans l'eau sans différence de profondeur. Pour ceci le but et bien d'observer beaucoup (59) donc (60) (61) dans son maximum et tout (62) dans (63) ; on peux vite séparer l'effet et la conséquences, donc dans la (62) et viceversa dans (63) et dans plus (64) (65) de (66) tout (67).
Vi é ancora da osservare XXXXX,XXXX si può XXXXX XXXXXX con XXXXXXXX od di	Vous venez encore d'observer xxxxx xxxxx

Page 4

Italian	**French**
(tutto questo ben inteso rispettivamente alla faccia dei XXXX e XXX di XXXX;) e si può comprendere come si deve comportarsi per non avere l'azione distrutta o neutralizzata. Ora poi vi sarebbe ancora da considerare la possibilità d'usufruire del massimo rendimento dell'apparecchio, perciò XXXXXX dia contemporaneamente un ottima azione, un minimo di consumo del XXXXXXX, perciò si può fare uso del metallo che il secondo cilindro concentrico va finire nel cilindro et reliè alla terra (V. ?) In seguito poi sarebbe bene di provare due specie:	(tout ceci lui bien entendu respectivement vrai pour XXXX et XXX de XXXX) et on peut comprendre comment se comporter pour ne pas avoir l'action détruite ou neutralisée. Maintenant il y aurait encore à considérer profiter d'un plus grand rendement de l'appareil ; car XXXXXX donne à la fois d'excellentes actions(?), car il est possible d'employer le métal du second cylindre concentrique finissant dans le cylindre relié à la terre (V. ?). Il serait ensuite intéressant de démontrer deux particularités:
a) XXXXXX formato con la XXXXXXXXX ad una parte di XXXXXX di XXXXX va finire nel XXXXXXX, nel 1 o 2:XXXXX a secondo il XXXXXXXXXXX di XXXXX	a) XXXXXX forme avec le XXXXXXXXX à une partie de XXXXXX de XXXXX va finir dans le XXXXXXX, dans le XXXXXXXXX un second XXXXXX de XXXXXXXXXXX
2) Fare l'azione in questione, puramente facendo agire l'apparecchio XXXXXXX come un semplice XXXXXXXX ben inteso solo sul mare si può fare tale prova ultima detta.	b) Produire l'action en question, simplement faire agir l'appareil comme un simple XXXXXXX. Bien entendu, il n'est possible de prouver ceci que sur la mer.

Page 5

Italian	**French**
Recezione (Ricezione): Nelle rispettive dimensioni, forme ect, non differenzia per nulla al dispositivo di trasmissione, ben inteso la diversità esiste puramente nella reversibilità dei relativi trasformatori, e l'ultima induzione, con un XXXXXX, anche poi finire che il medesimo ultimo cilindro a potrebbe avere una trasformazione diretta sul sistema, dimodoché (?) che poi questa a mezzo d'un relativo condensatore a reglage, e soccorritore (relais) farebbe funzionare il galvanometro (ore altro strumento indicatore) e dalla differenza, si viene definire l'azione ossia la presenza del sottomarino, in movimento ect.	**Réception:** Les dimensions respectives, formes ect, ne changent en rien le dispositif de transmission ; bien entendu la diversité existe seulement dans la réversibilité des transformateurs relatifs et la dernière induction, avec un XXXXXX, sur le dernier cylindre pourrait avoir une transformation dirigée vers le système, C'est au moyen d'un condensateur variable, d'un relais faisant fonctionner le galvanomètre (ou tout autre instrument de mesure) et de la différence que l'on vient définir l'action, c'est-à-dire la présence du sous-marin, mouvement ect.
Invece poi di ammetterò l'unione per induzione (....?) , preferibilmente potrebbe ammettersi quest'ultima(.....?) in	Par contre, on doit admettre l'union pour induction (…… ?) , pourrait s'admettre préférablement cette dernière (…. ?) en

derivazione unita al sistema direttamente per la trasmissione.	dérivation unie au système directement pour la transmission.

Page 6

Italian	**French**
Determinazioni generali e sommarie, per il progetto d'une esperienza in piccola distanza e forza, cioè per ma distanza da mare a mare di 150-200 m.Stazione di trasmissione:Cilindri 4 = trasformatori 3, (senza ave tenuto conto del 4 qualora si ammetta in unione diretta con il sistema di trasmissione = dico diretta per dire l'unione fatta per derivazione=Cilindri =a1 =a2=a3=a4 = trasformatori t1,t2,t3 – l= lunga.(..?) D. diametre5650, IV VI VI IV V IV VI= 53w	Déterminations générales et sommaires, pour le projet d'unes expérience en petite distance et force, c'est-à-dire distance de mer / mer de 150-200 m.Stazione de trasmissione:Cilindri 4 = transformateurs 3, (sans avé tenu compte du 4 qualora s'admette en union dirigée avec le système de transmission = dis dirigée pour dire l'union faite pour derivazione=Cilindri = a1 = a2=a3=a4 = transformateurs t1, t2, t3 – l=longueur. D. Diametre5650, IV VI VI IV V IV VI= 53w
N.B. Tutte le misure e determinazioni sono conforme ad un calcolo approssimativo perché ad esempio i trasformatori; numero precise di spire est non si può definir con un assoluta precisione, fino quanto si ha il rate preciso del potenziale e frequenza dell' apparecchio trasmettitore; così pure poi l'ammissione o non ammissione de condensatori ect, solo dopo tali dati definizioni assolute si puro definire all'uopo di quest'ultimo ciò condensatore (?)	Note.Toutes les mesures et les déterminations sont conforme à un calcul approximatif parce que, par exemple pour les transformateurs, le nombre précis de spires ne peut se définir avec une absolue précision que lorsque l'on connaît les valeurs précises du potentiel et de la fréquence du transmetteur. L'ajout ou non de condensateurs est déterminé après la connaissance absolue de ces données. LA1 XXXXXXX. A2 :XXXXXXXXXA3 XXXXXXXXXA4:XXXXXXXXXX
Si deve osservare quest'ultimo,come si moto nella prima paste di detta descrizione per far fronte alle cause diretto ed indiretto che può avene danno XXXXXXXQuanto al diametro, questo e determinato nell'uso d'un solo cilindro, ben intero qualora s'usa un sistema (..?) che porta un cilindro concentrico questo cambierà di motto pero XXXXXXXXXXXX d'ogni singolo cilindro.D=D1 XXXXXXXX D2=XXXXXXXXXXXXX D3=XXXXXXXXXXXXXD4= XXXXXXXXXXXXXX Trasformatori, l sara (?) (...?) XXXXXXXXXX Qualora poi come sé detto sopra che s'ammetta un sistema con il relative cilindro interno l'interspazio a ossia la di = stanza da un cilindro all'altro sara sempre d'un minimum di XXXXXXXXXPer quanto riguarda l'ammissione delle singole batterie d'accumulatori o pile ect devessere ben definita e regolata cioè vale a dire che questo non venga dare un effetto di reattanza al sistema didamoche non solo renderebbero a neutralizzare l'azione del dispositivo, ma invece molto più impedire la medesima regolare trasmissione.LA1 XXXXXXX. A2 :XXXXXXXXXA3 XXXXXXXXXA4:XXXXXXXXXX	On doit observer ce dernier …. (?), Quand au diamètre, il est déterminé par l'emploi d'un seul cylindre, en bonne condition qualora on emploie un système (.. ?) qu'il porte un cylindre concentrique qui sera remplacer XXXXXXXXXXXX de chaque cylindre.. (?),,D=D1 XXXXXXXX D2=XXXXXXXXXXXXXD3 =XXXXXXXXXXXXXD4= XXXXXXXXXXXXXX Transformateurs (?)Comme je l'ai dit,(?) on utilisera un system avec un cylindre (relatif?) interne, c'est a dire ...L'espace d'un cylindre à l'autre sera toujours d'un minimum de 53=N5+VI IV V i=9 i+95En ce qui concerne l'admission des batteries individuelles d'accumulateurs ou de piles ect, elles devront être bien réglées pour ne pas qu'elles introduisent un effet de réactance au système, ce qui non seulement neutralisera l'action du dispositif, mais pourrait beaucoup plus empêcher une transmission régulière

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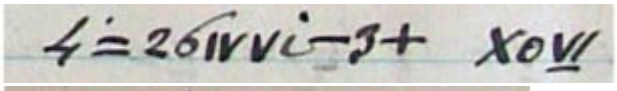
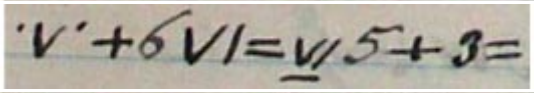
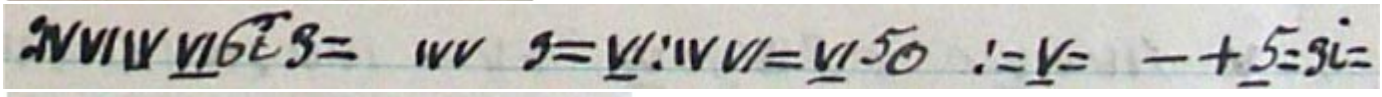
Italian	**French**
In linea generale queste devono dare, dedotte le resistenze del relativo circuito delle batterie, in media ma corrente in Watt, D'un minimo ad un massimo della XXXXXX; ed in principe occorre un'attenzione tutt'affatto speciale e particolare quando n'è nel circuito del dispositivo. Resta poi sott'inteso che le singole resistenze delle batterie sono variabile, dimodochè si può determinare, o cambiare la potenza (in Watt) della corrente.	En ligne générale celles-ci doivent donner, déduites les résistances du relatif circuit des batteries, un courrant moyen en Watt d'un minimum et d'un maximum de XXXXXXX; et par principe il faut une attention tout à fait spéciale au circuit du dispositif. Il reste ensuite sous-entendu que les résistances individuelles des batteries étant variables la puissance du courant (en Watt) peut changer.

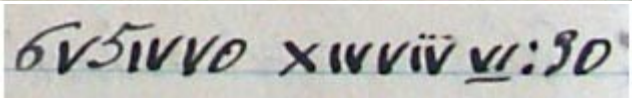
Trasmettitore od eccitatore Questo, ha dato già un principio di base per definire le relative grandezze dei cilindri sopraccitati; questo sarà (o come sé preso per base) d'una potenza d'un KWT. minimum, e la bobina addebiterà pur una media da 4 -5 amp.; ben inteso è poi molto meglio farne la relativa (trasmissione) di unioni indiretta, come si parlo piu ???..	Transmetteur ou excitateur.J'ai déjà donné déjà un principe de base pour de définir des relatives grandeurs des cylindres ceci sera (ou comme lui pris pour de base) d'une puissance d'un KWT.minimum, et il bobine débitera aussi une moyenne de 4 -5 amp. ; bien entendu, il est ensuite préférable de faire la relative (transmission)d'unions indirecte, comme on parle piu ???????????????????.
Trasformatori Questi per la rispettiva definizione, oltre dopo conosciuta l'alternanza, del'il potenziale dell' apparecchio di trasmissione, e molto bene, per tale determinazione, (nella possibilità) fare una prova dell' apparecchio trasmettitore con XXXXXXXXX, con XXXXXXXXXXXXXX; da ciò si può XXXXXXX XXXXXXXXX; da ciò sé pure per base per determinare quale sarà l'efficienza del 1er trasformatore, ed in generale nel primo a1, s' aumenta un po l'intensità nel secondo s'equilibra le fase, con i terzo della data del massimo del potenziale e rendimento dell'apparecchio o dispositivo.	Transformateurs.Ceux pour la respective définition, au-delà d'après connue l'alternance, du potentiel de l'appareil de transmission, et aussi bien, pour telle détermination, (dans c'est possible) faire un test et préparer le transmetteur avec XXXXXXXXX, avec XXXXXXXXXXXXXX ; et s'il se peut XXXXXXX XXXXXXXXX ; Cela l'aussi pour déterminer qu'elle sera l'efficacité du 1er transformateur, (….. ?) on augmente un peu l'intensité dans la seconde on équilibre la phase, avec troisième de donnée du maximum du potentiel et rendement d……(?)

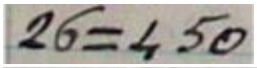
The Code

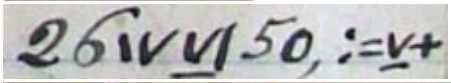
1 

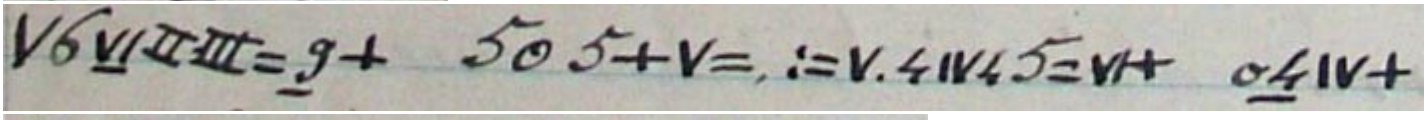
2 

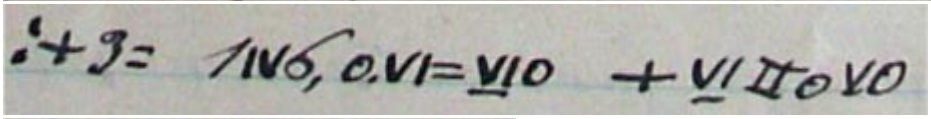
3 

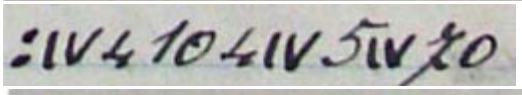
4 

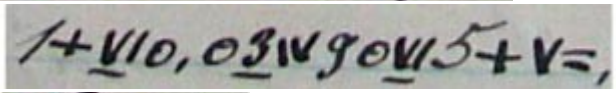
5 

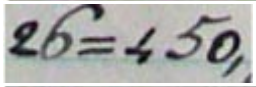
6 

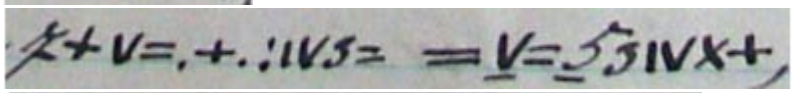
7 

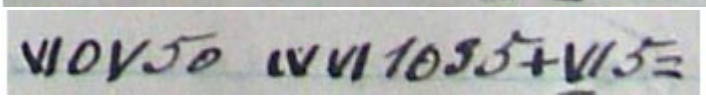
8 

9 

10 

11 

12 

13 

In English… (Google Translate)

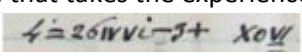
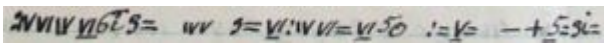
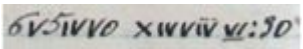
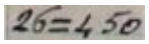
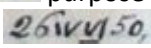
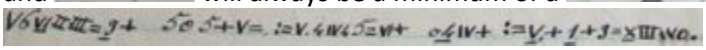
Page 1 English

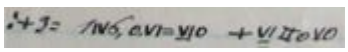
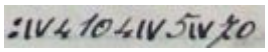
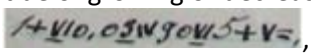
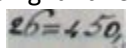
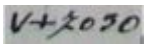
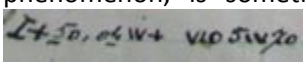
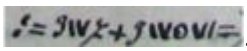
Fulfillment by the action of signaling submarines at various distances = much above the water as the water =

In the determination of the transmission (such as directly to the reception) should try behalf of all special effects and causes all, that no one even made it into the subject, or you fly over slightly on some point the question, who already have (such suffering and causes) a good value in the TSF common, if they were considered;

then while in our case they have a great importance and value to the work we undertake and turned directly to get the best and accurate results.
(Holding, forward all, realize that the transmit and receive comes from a sea to sea, then submare, we already know in common TSF, greatly facilitates the flow, although this is something minor consideration, much more to consider instead, when you do the work in between ship and shore and vice versa)

So much for the work to blossom into the water as it should be observed carefully as indicated below, and take account of the ways of resolutions in each case.

It should be taken into account if the time that takes the experience (or work in question) themselves day or night, clear or stormy weather, etc... and in that case  or  purpose and make an extension in  and  will always be a minimum of a  ,


If the sea and the tide of growing or decreasing: and for this  a  compared to its  ,  purely because the tide over all the reasons that lead to this phenomenon, is something even the reason or cause of  (And for the moment leave aside the  of  .)

Page 2
In this third effect we come to the consideration of a (18) and if that is maximally for large distances, however not of lesser consideration even for small distances, therefore, (19) then you now (20) so as to have (21) therefore the first cylinder to the station (22)

As hath been said (23) you can make the same observations with regard to (24) minus the difference of (25), starting from the base, (or principle) that they are with or without (26) his (27), then s'arriane (?) of (28) to (29) or with (30) will define the question as having a (31) as stated above, then if instead and (32), then we must (33), coming to the conclusion that these influences a lot in (34) and (35), and then you look to take but ambiguous position and (36), (37) of (38) to the lowest possible (39), (40) and (41) on (42) of (43) to the lowest possible (44) to (45), and (46)

On the same principles mentioned above is one where equality itself in a period of (47), and this must be taken into account that these are the (48) of (49) and have (51), and I think therefore superfluous prolungarmi (prolonged ?), just observe (52)

Page 3
It is well to observe (53) where it is (54) if self in (55) to (56) or in (57) to (58). Now as you said on the surface of the water you can define the same observations (for rejoicing?) Is doing the action in the water with no difference in depth. For this the real look very good (59) then (60) on (61) in its maximum and everything (62) in (63), so it's easy to deduce the effect and consequences, so in (62) and vice versa in (63) and more (64) to (65) of (66) around (67).

There is yet to be observed XXXXX, XXXX XXXXX XXXXXX and XXXXXXXX you can od (?).

Page 4

(All this in the face of well-understood, respectively, and XXX XXXX XXXX); and you can understand how you must behave so as not to have the action destroyed or neutralized. Now then there would still be considered the possibility to take advantage of the maximum efficiency of the apparatus, therefore XXXXXX give simultaneously an excellent action, a minimum of consumption of XXXXXXX, so you can make use of the metal that the second concentric cylinder goes to end in the cylinder that rely on the ground (See?) Following then it would be good to try two species:

1) With the format XXXXXX XXXXXXXXX to a part of XXXXXX XXXXX goes finish in XXXXXXX, in 1 or 2: XXXXX according to the XXXXXXXXXXX XXXXX.

2) Perform the action in question, merely making the device act as a simple XXXXXXX XXXXXXXX well understood only on the sea you can do this test last called.

Page 5

Reception (reception): In the respective sizes, shapes, etc., does not differentiate for anything in the transmission device, well understood diversity exists purely in the reversibility of its transformers, and the last induction, with a XXXXXX, even then finish that the same last cylinder could have a direct conversion system; so that (?) then this means that a relative of condenser reglage (?), and helper (relay) would run the galvanometer (hours other instrument indicator) and the difference, is to define the 'action i.e., the presence of the submarine, moving, etc.

Rather than admit the union for induction (....?), preferably the latter may be admitted (.....?) Shunt coupled to the system directly to the transmission.

Page 6

Determinations general and summary for the project d'une experience in small distance and strength, but that is to distance from sea to sea to 150-200 m.Stazione Transmission: 4 Cylinders = transformers 3 (ave without taking into account the 4 where we admit it in direct union with the transmission system = direct say to say the union made for derivation Cylinders = a1 = a2 = a3 = a4 = transformer = t1, t2, t3 - l = long. (..?) D. diametre5650, IV IV IV V VI VI VI = 53W.

N.B. All measurements and determinations are subject to an approximate calculation because such transformers; precise number of turns east you cannot will define with absolute precision, down as far as you have the precise rate of potential and frequency of 'transmitter device, and likewise also the admission or non-admission of capacitors, etc., only after such data is pure absolute definitions define what the purpose of this capacitor (?).

It should be noted the latter, as in the first motion pastes of said description to cope with the direct and indirect causes that can damage oats XXXXXXX Quanto to the diameter, and this resulted in the use of a single cylinder, whole well if still used a system (.. ?) carrying a cylinder concentric with this change of pear XXXXXXXXXXX motto of every single cylinder. D XXXXXXXX D1 = D2 = D3 = xxxxxxxxxxxxx XXXXXXXXXXXXXD4 = xxxxxxxxxxxxxx transformers, l will be (?) (...?) XXXXXXXXXXX If then as said above that self s'ammetta a system with the inner cylinder relative to the gap that is, of a cylinder = room to another will always be of a minimum of XXXXXXXXX Per as regards the admission of the cell d' accumulators or batteries, etc., stall must be well defined and regulated that is to say that this is not to give an effect of the system reactance didamoche (?) not only makes it to neutralize the action of the device, but instead much more to prevent the same regular transmission. LA1 XXXXXXX . A2: XXXXXXXXXA3 XXXXXXXXXA4 : XXXXXXXXXX

Page 7

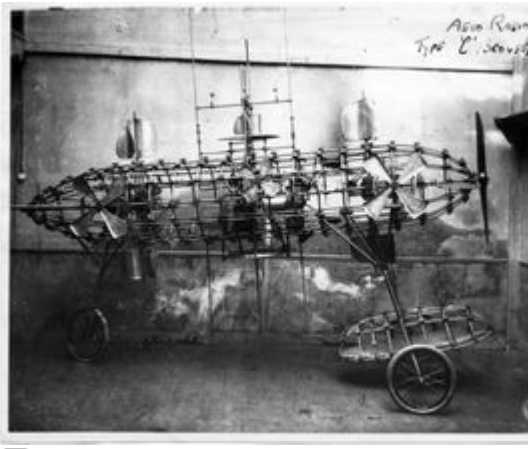
In general these must give, minus the resistance of the circuit on the battery, but on average, in watts current, On a minimum to a maximum of XXXXXX, and Prince tutt'affatto special and particular attention is necessary when none in the circuit of the device. It is then sott'inteso that the individual resistances of the batteries are variable; so that you can determine or change the power (in watts) of the current.

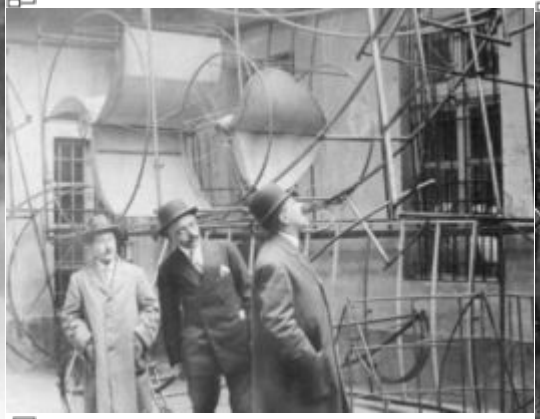
This transmitter or exciter, has already given a basic principle for defining the relative sizes of the cylinders mentioned above, this will be (or as the basis for self-taken) of a power of a KWT. minimum, and the coil will charge while an average of 4 to 5 amps., then of course it is much better to make its (transmission) of indirect unions, as we talk more?

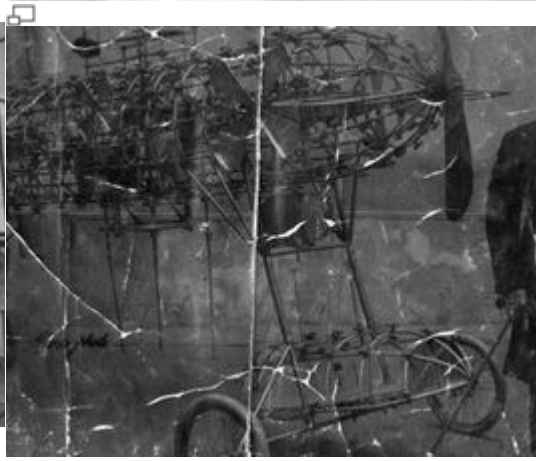
These transformers for the respective definition video as well known after the alternation, del'il potential of transmitting apparatus, and very good for such determination, (the ability) to do a test of the transmitter device with XXXXXXXXX with xxxxxxxxxxxxx; from this can XXXXXXX XXXXXXXXX; from what itself well to determine which will be the basis for the efficiency of the transformer 1er, and in general in the first a1, s' increases a little the intensity in the second s'equilibra the stage, with the third of the date of maximum potential and efficiency of the appliance or device.

The Photo Album

Marseille







England

THE DROUGHT.

ITS CAUSE AND PROBABLE DURATION

THE DROUGHT.

ITS CAUSE AND PROBABLE DURATION.

By Professor L. G. V. ROTA.

So much has been written, and so many would-be explanations have been offered by meteorologists and others as to the cause and probable duration of the prolonged drought, that the time has arrived when some public announcement should be made in such terms as will enable your readers to understand why the whole world has been suffering from severe drought, and what the causes are which have produced the present abnormal atmospheric conditions. Sun spots have been the favourite explanation, but it is more than time that this fetish should be thrown aside, as sun spots do not affect the weather, nor do they cause the drought. Professor Sir J. J. Thomson, Master of Trinity College, Cambridge, puts the situation tersely when he states: "There are many things in meteorology that we do not understand. I am inclined to look upon the drought as one of them . . . . it is impossible to say what exactly is the cause of the drought." Meteorologists have been attempting to explain the drought without having a definite knowledge of its causes.

My studies have led to the discovery of three classes of telluric, or earth, currents, never previously defined. These currents have no analogy with Ampere's thermo-electric currents. The late Lord Kelvin proclaimed, shortly before his death, the existence of an unknown telluric current, but without further defining it. It is evident also from Newton's letter to Bentley in 1691 that the discoverer of the law of gravitation has some suspicion of a law of universal attraction. These telluric currents vary in their specific nature, their intensity, direction, and limits of influence. Their radius of action is immense, their action very powerful, and they cause the natural phenomena which scientists have endeavoured in vain to explain.

Telluric Currents.

These telluric currents have brought about an atmospheric condition which renders impos-

LY HERALD

LATEST MARVELS OF SCIENCE

POWER TO MAKE A NEW WORLD

TELLURIC CURRENTS

STARTLING CLAIMS OF A YOUNG SCIENTIST

A company is about to be floated to work the invention of a very great, but little known scientist, whose discovery, if it fulfils his claims, will literally revolutionise the world.

This fact was disclosed to me yesterday (writes a DAILY HERALD correspondent) by two financiers in their office in the City of London.

This invention, I was told, is one that can cause battleships, submarines, aeroplanes and guns to crumble to dust the moment any Government gives orders to move them.

UN-MANNED CRAFT

That was only the beginning of the marvel. The mysterious force about to be harnessed for the service of man would immensely speed up travel, transport, and communication, whether by land, water, or air, cheapen every sort of manufacture, and enhance every domestic and social amenity.

For instance, a cargo of mails or goods could be sent across the Atlantic through the upper air, without a human being aboard the craft, at a speed of 10 to 400 miles an hour. The vessel would rise vertically to a prescribed height, travel horizontally in

- Mont Saint Aignan





- Genissieux


- Marseille
- England
- The Apparatus

Listening to the Rota Effect

Louis Rota worked with classic vintage bakelite headphones as shown on this picture.

Nevertheless, he claimed that the effectiveness of the headphones could be improved by what he called “the harmonization” of the metallic parts of the headphones.

The experiment

The following experiment was created (by Mike Watson) in 1960. When I first started to listen for Rota's currents on the block dug up from his laboratory site in 1959, I heard nothing with headphones or with any other means. Someone pointed out that when Rota did medical diagnosis, see Medical Applications, he stroked metal rods held in the patients hand. I tried a similar thing using metal disks as shown below. I heard several variations in click intensity when one of the phone contacts was touched on the metal but soon found that this was caused by sampling 50 Hz mains pick up from the house wiring. Doing the same in a remote area showed a variation especially if a short antenna was used. It was found that the click was due to the high inductance of the high impedance headphones storing a minute input current and releasing the stored energy as an inductive click as soon the contact was broken. Variations found were due to ultra low frequency signals of the order of 0.01 Hz or less. Note that Rota used a stop watch, as seen in the photograph on the main page of this site, so the variations he was hearing must have had a long cycle time.

This experiment needs doing with two sets of deeply buried insulated metal plates separated by some meters. Again it needs a site a long way from 50/60Hz mains wiring to be effective. The great benefit of this method is that it is totally passive, with no electronics to give spurious leakage currents.

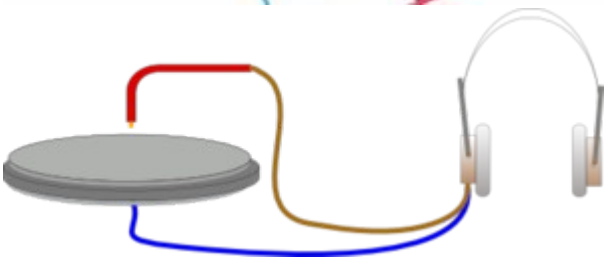
It is worth repeating what is mentioned elsewhere on this site[1]:

Maxwell's equations lead to the prediction of electromagnetic waves in a vacuum, which are transverse (in that the electric fields and magnetic fields vary perpendicularly to the direction of propagation)However, in a plasma or a confined space, there can exist waves which are either longitudinal or transverse, or a mixture of both. Rota' universal current propagates in a conductive medium such as salt water and the earth which for these puposes is a plasma.

For this reason the universal current is most likely a largely magnetic longitudinal wave which can only exist in water or the earth. This would also explain how Rota's patented "Means of detecting Explosive Mines.." (L.G.V.Rota patents) in which the field produced by a paramagnetic body entering the field of a telluric current produces a shock or turbulence detectable by his apparatus. It would seem reasonable to assume that a ship interacting with the very low frequency mostly magnetic telluric current field would have circulating currents induced in its hull and these would be detectable at a distance with a compass needle.

- One set of headphone
- two soft iron disks
- One plastic or Bristol paper disk
- A few inches of electric wire

A wire is soldered at one disk. The three disks are then staked together like a capacitor



- **The Procedure**

Prick quickly the superior disc with the free wire while listening attentively with the headphones.

The observation

Sometimes it is possible to ear a small "click " in the helmet when the wire touches the disk. Occasionally there are “good” series (3 to 4 clicks on 10 picks), sometimes nothing happens during ten picks.

The clicks appear in variable manner:

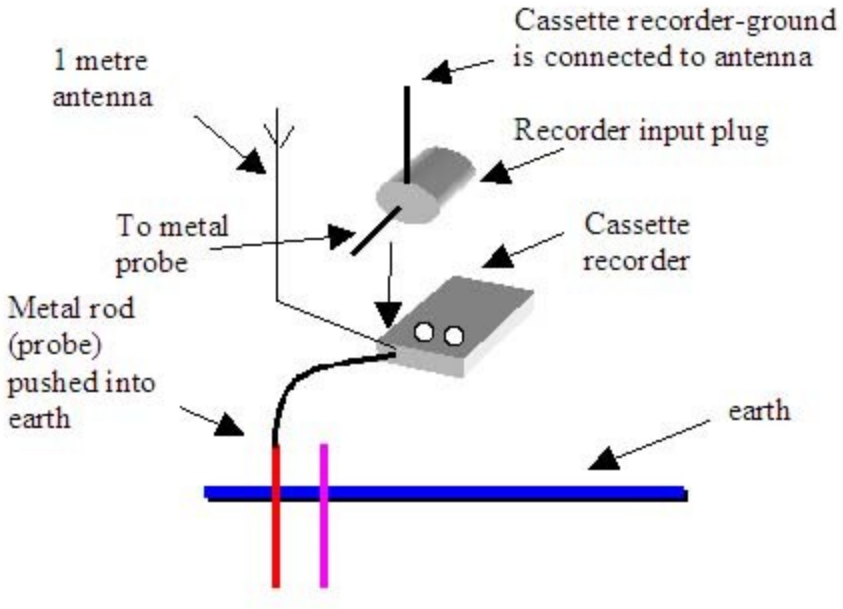
- At the moment of the contact
- Immediately following the contact break
- Half second after the contact break.
- Some days, it just does not work.

Are these clicks purely random and all of them explicable by the electromagnetic laws? Apparently not. Louis Rota spent nearly 40 years listening to such clicks through more sophisticated apparatus, with astonishing results.

The Rota's Effect

A Mike Watson experiment

The experience



Description

Notes

1. Some ground produces nothing except 50Hz hum.
2. To work without a cassette recorder, either the metal probe or a metal block connected in series with the probe needs activating. I do not know how to do this activation. Your father had a method which he kept secret. His portable block with the Roman numerals on was used as an amplifier.
3. The current indicators in Louis Rota's note book such as +9 IV 46 V+ etc. are reactions on the potable block. The IV is the number of the plug on the block box. 9 is probably the number of reactions heard in the headphone.
4. The currents pulse in a rhythmic manner.
5. Did Louis Rota use any electronic amplifiers? Probably not.
6. The oscilloscope pictures above are taken from the cassette recordings. There is a background of 50 Hz which requires filtering out. It was probably for this reason that your father moved from Rouen to Genessieux

---

Is the Universal Current a Zenneck Wave?

The Zenneck surface wave

Along with others, around 1906 J. Zenneck was attempting to explain how radio transmission could curve around the earth as was shown by Marconi's early radio transmissions across the Atlantic. Various theories where around at the time one of which was Zenneck's surface wave [1]; which was shortly after formalized by Sommerfeld [2].

The Zenneck surface wave is an electromagnetic wave which is conducted in the earth and along the earth-air boundary. It is not the same as the common radio frequency ground wave produced by the usual antenna configurations. To get a feel for its properties:

Quoting James Corum:

"The distinguishing feature of the Zenneck wave is the propagating energy does not spread like radiation, but is concentrated near the guiding surface. Zenneck conceived that the earth's surface would perform in a manner similar to a single conducting wire and Sommerfeld had shown that an electromagnetic wave could be guided along a wire of finite conductivity".

James R. Wait [4] states that:

"The field amplitude varies inversely as the square root of the horizontal distance from the source".

It's interesting to note that Sommerfeld made a point of distinguishing between the "electrodynamic" surface wave and its Hertzian counterpart the space wave, believing that both components could be present in varying proportion in the wave complex. It was Tesla's assertion that the exact composition of the emissions was dependent upon the design of the transmitter.

In the 1916 interview Tesla said,

". . . the mathematical treatise of A. Sommerfeld,… shows that my theory is correct, that I was right in my explanations of the phenomena . . . ."

The paper, "Uber die Ausbreitlung der Wellen in der drahtlosen Telegraphie," ["Propagation of Waves in Wireless Telegraphy," Annalen der Physik, Vol. 28, March, 1909, pp. 665-736] contained a formal analytical solution for the radiation from a short vertical monopole over a finitely conducting ground, and was written within the context of Zenneck's 1907 formulation. It posits two contrasting concepts which may be designated by the terms 'space waves' and 'surface waves.' The Hertzian electrodynamic waves are [space waves]. Electrodynamic waves on wires are typical surface waves.

The losses shown in the propagation of the Zenneck wave increase after about 30 kHz, so its usefulness, for the purposes of this discussion, are in the low frequency (LF) to the Extra low frequency (ELF) bands.

Rota's Universal Current

In Rota's 1919 patent number GB128624: Apparatus for the Concentration of Electric Waves, page 3 claim 45:

"The apparatus shown in Figs. 8 and 9 is especially suitable for signifying the presence of a magnetic body which may be upon or in the water… and this body we admit may be a submarine. Page 3 Claims 50, 55 states: The idea will certainly occur that it is impossible to transmit through sea as it is true that sea water absorbs very rapidly electric waves but it must be remembered that the known electric waves are simply a disturbance of the magnetic lines of force instead of as we obtain in the present invention the production of real electric current. For this reason the absorption over a greater part of its travel and its production is dynamically stronger and more united. The wave therefore has the faculty of being perceived by the perception apparatus, being signaled at the receiving station with very delicate apparatus, that is to say by means of a telephone of the micro-ampere type… or by means of a galvanometer….for example the Deprez-D'Arsonval."

We know from Rota's notes that he determined almost everything by experiment. When this patent was written he was working for the British Government's National Physical Laboratory, Teddington, UK. This patent tells us some interesting facts:

- Rota must have been operating in the LF, VLF frequency range, since otherwise a galvanometer would show nothing, no rectification is shown on the patent not even a coherer, or even a mention of it .
- The fact that he received signals under water and notes the low attenuation, which he terms "dynamically stronger and more united" strongly suggests Zenneck wave transmission with the low 1/√(distance) attenuation as suggested by Waite.
- If Rota's, cylindrical/ cylindrical placed strips parallel to the axis, configuration has any special virtue is not clear. The Zenneck wave will certainly be polarized so this might be the reason for efficacy of his cylinder antennae.
- The cylindrical antenna was to be used to transmit and receive at sea. It is noticeable that the waves transmitted and received ship to ship though the sea had to be retransmitted through the air for reception by land based receivers, as though the signal were reluctant to leave the sea and travel over land.
- In the figures the transmitter is sketched as a spark gap excited step up transformer.

Finally, regarding this patent there are several incomprehensible claims in it, passing over whether cylinders could be made to amplify any electromagnetic wave, the other claim Page 2 claim 15.

"The battery (elsewhere: battery, accumulator or dynamo) has as its object to reconstitute all the forces lost by passive losses, resistances and otherwise, and further to give to the energy of the wave its constitutive and primitive property". "The cylinders increase the capacity *and diminish the* resistance *and in union with the relative* inductions *and currents of the batteries they define the energy of the wave with intensity and phase desired and determined".*

This is not possible with the information given in the patent. For the direct battery current to act on the radio frequency picked up by the antenna cylinders, some form of non-linear component or a thermionic tube amplifier is needed which is not present in the patent.

Rota's patent GB129,059 1919 says in claim 10:

"I have discovered that there are certain telluric or earth currents which produce in the earth magnetic vortices. The presence or intensity of these currents is shown when they encounter a magnetic or paramagnetic body however small this may be. Due to this fact it is possible to recognize the presence of a mine, submarine ship or other magnetic or paramagnetic body…"

Today we are well aware that solar activity via perturbation of the earth's magnetic field induces telluric currents in the earth. Rota's use of these currents flowing through the sea again suggests VLF Zenneck waves, generated as a result of solar activity, of course huge magnetic disturbances will produce a mixture of electrodynamic fields and currents, some in the earth and some as VLF hertzian electromagnetic waves. Rota's deeply buried antenna specifically detected deep earth current fluctuations.

The Metal Activation

The second problem: How does the Universal Current activate metals?

There is no physical evidence of low frequency electromagnetic fields producing decomposition of metals at the atomic level, where, according to Rota the "latent energy of the metal is released".

It is possible that Rota was wrong and some other process was at work. The main evidence for the veracity of Rota's claims is probably those of Dr. Kresser. Kresser challenged Rota to tell him what was wrong with a number of patients without any prior information. Apparently, Rota was completely successful. The essential point is that Rota used his sets of activated metals to do diagnosis, listening for reactions between the universal current active in the patient against those of the metals. Kresser seemed to have used the method himself using Rota's apparatus but makes no comment on what the currents sounded like.

The nub of the problem is simply that if Rota is right electromagnetic energy can activate the atomic structure of matter causing it to release energy even after the stimulus is removed. Furthermore, if the universal currents are electromagnetism then they conform to Maxwell's equations, but must have an additional parameter which is the source of their power to awaken the latent energy of matter. There is no evidence that electromagnetic fields artificially generated in the usual way have this effect.

LGV Rota and the death penalty

LGV Rota's son was quite surprised to learn recently by browsing the internet that his father's work was referenced by at least 2 US court cases:

- **U.S Supreme court**

case against the State of Louisiana in 1985 (471 U.S. 1080 (1985) – Jimmy L.Class v. Louisiana No. 84-6030)
28 L.G.V. Rota, a renowned French electrical scientist, concluded after extensive research that
"[i]n every case of electrocution, . . . death inevitably supervenes but it may be very long, and above all, excruciatingly painful . . . . [T]he space of time before death supervenes varies according to the subject. Some have a greater

physiological resistance than others. I do not believe that anyone killed by electrocution dies instantly, no matter how weak the [471 U.S. 1080 , 1089] subject may be. In certain cases death will not have come about even though the point of contact of the electrode with the body shows distinct burns. Thus, in particular cases, the condemned person may be alive and even conscious for several minutes without it being possible for a doctor to say whether the victim is dead or not. . . . This method of execution is a form of torture." 29

- **Supreme Judicial Court of Massachusetts**

http://www.nodp.org/ma/stacks/369_Mass_242.txt

While the actual physical and psychological pain of execution itself is, of course, immeasurable, there is a sharp conflict of expert opinion regarding whether electrocution produces instantaneous loss of consciousness. At least one observer, a French scientist, concluded: "I do not believe that anyone killed by electrocution dies instantly, no matter how weak the subject may be." Comment, The Death Penalty Cases, 56 Cal. L. Rev. 1268, 1339 (1968), quoting Prof. L. G. V. Rota in Scott, [***14]

Ground Induced Current

On March 13, 1989, at 2:44 am, a transformer failure on one of the main power transmission lines in the Hydro Quebec system precipitated a catastrophic collapse of the entire power grid. The string of events that produced the collapse took only 90 seconds from start to finish. There was no time for any meaningful intervention. The transformer failure was a direct consequence of ground induced currents from a space weather disturbance high in the atmosphere. 6 million people lost electrical power for 9 or more hours. The space weather disturbance that produced this devastation was a great magnetic storm. Great magnetic storms are awesome disturbances in the near Earth space environment that occur relatively rarely. The last five occurred in February 1986, March 1989, March 1991, November 1991 and May 1992.

Medical Applications

By Dr Kressler - Translated by Dr Watson

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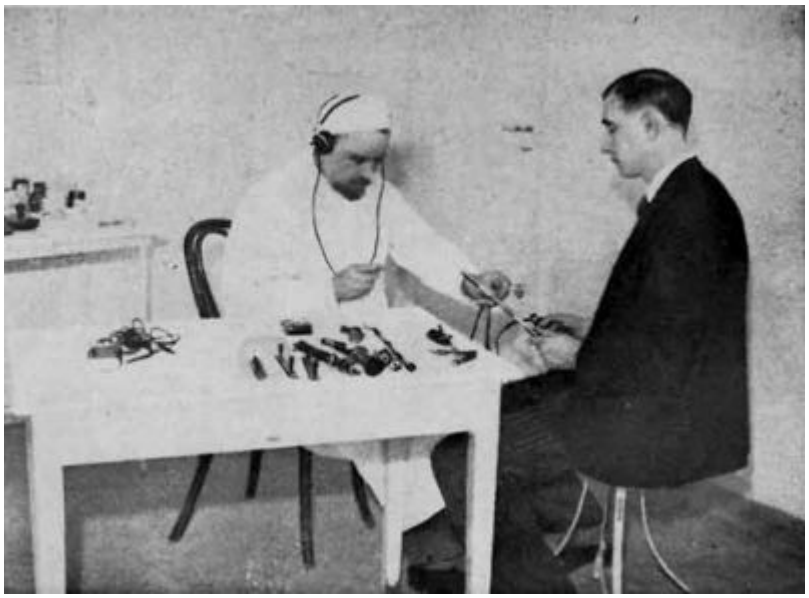
- 5 Diagnostic sheet



(Much of the first part reiterates information already been discussed here but it is included in order to give another perspective. Later Dr. Kresser discusses the medical aspect)

Dr. Kresser at work using Rota's diagnostic method, note the stop watch and multi-

metallic rod in patients left hand. Another rod is seen lying on the table.

FORWARD

It is not up to me to either confirm or deny the scientific theories of M. Rota. They are moreover, in so far as I can understand them of such an extended nature and of such a complexity, that, except can be for scientists versed in the physical sciences and mathematics they could be checked only by practical experiment. It is on this ground that I placed Mr. Rota, when, via a mutual friend, I had good fortune to make his acquaintance and to speak with him about the possibilities of applying his discoveries to human pathology.

I thus have presented to him, at my Surgery a number of known tuberculosis patients, for him to examine according to his personal method, in my presence and without any interrogation except that of date and place of birth of the subject and his parents, necessary, as one will see it in this note, for the orientation of his diagnosis. For each one of these patients, Mr. Rota has very exactly defined the pulmonary localization or extra pulmonary location of the tuberculosis and regarding the pulmonary tuberculosis, the infected side, the extent of the lesion, latent indications; chronic or sub-acute of their development. One of them besides, instantaneously showed the coexistence of a recent syphilitic infection which was verified by me with the aid of a serological examination.

As a result of those first tests, which were very interesting, I had the occasion to have M Rota in my consulting room examine my private clients which had various other illnesses.

In these very different cases (gastro-intestinal infection, vascular, chronic rheumatism, neuropathic states) the results of these examinations were equally conclusive, and without any questions M. Rota very rapidly determined the trouble and cause, stating the organs affected, sometimes indicating the date of the start of the illness, not to mention other revelations more surprising on the illness history of the subjects their genital activity (in the case of women) and certain of their psychological tendencies. I have never been able to bring such a therapeutic assessment as his method was able to give. I restricted myself to advise him to limit himself, in his tests on this subject and to go for general symptoms such as tiredness, nervous excitation insomnia given that changes will be easy to verify.

Anyway, the result of numerous conversations I have had with M. Rota and the discussion of the facts; the comparison of medical phenomena and physical phenomena observed by him in the course of his studies on the Universal Currents, these latter merit being pursued in the sense of their biological applications.

THE COSMO-DYNAMISM AND ITS APPLICATION TO MEDICINE

Dr. H. Kresser,March 1939

MESDAMES, SIRS,

Before I start, much of this talk will present passages which are difficult and abstract. Allow me therefore to read you to read a sonnet.

(The sonnet is irrelevant here so it is left out also the following paragraph about the poet's intuition)
After following this matter for some months, a senior officer of the Navy, very current with scientific and medical matters and the head of a most important engineering department, concluded "You are forty years in advance of modern physics".

Also you will not be astonished if I come this evening to bring you some surprising facts, that speak of natural forces which are, up to now, unknown, and to propose that medicine, whatever progress we have achieved in fifty years, bases itself on these new and methods, and since in addition some of my eminent colleagues agreed to answer our invitation, I request them earnestly not to baulk at the unknown and innovative facts and theories, but listen without preconceived ideas, because I affirm myself ready to submit to their tests and to their discussion all that I will expose here in. It seems essential first of all, to present the circumstances which lead me to take an interest in this work.

M.Rota was born in Italy, in Piemont; his forbears originating in Savoy and in Corsica, one of them lost an arm at Austerlitz. After having frequented various private schools, he continued scientific studies under the direction of the great savant Secchi.

From adolescence M. Rota showed, in the natural and mathematical sciences, an out of the ordinary intelligence as shown by his embarrassing questions and deductions put to his professors. Animated by a surplus of drive and scientific curiosity, he was not content to just assimilate knowledge of contemporary science, but already, by his original studies he was seeking to augment and outstrip. Towards 1910, using the known laws of science, he commenced research into the so called telluric currents. He thought initially that this latter were of a magnetic nature and he conducted, in consequence, his first experiments and research on the concentration of electromagnetic waves of long wavelength using the earth as a collecting agent.

As a result he designed and constructed in his laboratory at Marseilles in 1914, 1915 an electromagnetic “stabilisateur” on a small scale, with which he made his first tests in open air; experiments that gave results that surpassed his expectation.(These are related in Le Matin, September 15th 1915). But he had not foreseen that after he had lightly touched the apparatus he was thrown brutally to earth where he remained unconscious for 50 minutes….

The next half page digresses into how great scientists such as Galvani, Papin, Pasteur and Galileo attached significance to small events to yield advances in knowledge. This is of no interest here and has been left out.

Furthermore, since the young Rota utilized for his stabilizer, a source of electricity of very low intensity he asked how such a minimal force had been magnified into a force capable of giving him such a shock.

Having eliminated a certain number of hypotheses, he was forced to the view that there existed at the moment of the experiment an unknown natural force of very high power that had multiplied the intensity of the electrical energy employed.

It required years of perseverant research to identify the force, the mysterious “x” in the equation. It would need more time than we have at our disposal to describe the stages which lead M. Rota to discover the existence of the 361 currents which he described as Universal.

It is sufficient, moreover, to visit the facility at Mont Saint Aignan, France, in Seine-Inferieure where M. Rota has installed his geophysical and geodynamic centre which cost millions and years of work to realize what considerable work he has done. Strange and voluminous multi-metallic blocks are buried at great depth in the soil and from which lead hundreds of cables. These are connected together to form some nine kilometers of aerial and subterranean cables. These cables end up in concrete sheds or “block-houses” where delicate apparatus allows them to be interconnected in an infinity of combinations. In the central building where all the cable end up a large apparatus, entirely designed and constructed by M. Rota [Universal Current Direction Finder or Cage à Moineaux Fig. 5] , allows him to control the universal currents, to disclose their characteristic and to show their direction, origin, qualities and to study their properties.

What are the Universal Currents?

According to M. Rota they are constant in their direction, but variable in their intensity and density, depending on the time and place. They are at the origin of worlds, assuring the mechanism of the universe and dispensers of life and death.

The characteristic of a current at a given époque and in a given place are reproduced with a frequency which it has been possible to determine. The laws which govern them are in effect immutable.

The Universal Currents create, maintain, modify and remove organic and inorganic life on the earth. The variations of intensity and density which occur are the causes of the actions and reactions which operate the one upon the other

according to the place and époque. They give rise to phenomena which can be verified without being able always to explain them.

But, you may say, M. Rota up to now is the only person cognizant of the existence of these currents, how is it that no one else has ever seen them?

Permit me to say to you that in nature there may well be other unknown forces. There are effects, as with these universal currents, where an event occurs which does not seem to have a known cause. This has been noticed by certain Savants and certain researchers such as Gustave Le Bon, whom I had the honor to attend in the latter years of his life. I recall his prophetic views now that I have been able to confront them with the discoveries of M. Rota.

There are other forces with complicated laws that we have harnessed and utilize each day in various diverse forms without knowing what they are, magnetism, radio waves, x-rays etc.. To stick to most frequently employed force electricity, one knows it only by the defined phenomena which it causes and by its uses. If you pass a magnet over a piece of iron it becomes magnetized, why? What are electricity and electromagnetism, fluids, gas vibrations? I would be very astonished if somebody among you could answer that question.

And yet these force exist about us in nature, we are reduced to producing them artificially with great supplies of steam, petrol motors, water wheels and excessively complicated machinery: dynamos, transformers, intermediaries without doubt useless, and also, is it not true, at great expense. Nevertheless in a dynamo there is iron and copper, and the electrical conductor is copper or other metal, what then? These are question M. Rota can answer.

But we will here open up the mass of discoveries made by this inventor.

The universal currents conditioning the movement of worlds, they affect the earth and we must be grateful for without them we would go into the infinite. When there is a lack of accord between them we feel annoying effects; tidal waves, earthquakes and even stranger the appearance of social disturbance. This brings to mind a conversation had between M. Rota, Commandant Lachouque and myself, the first time that the latter took me to Mont Saint Aignan, France.

" We enter, said he, a period from 1936 to 1946 where certain currents in certain places and at certain dates will produce strange effects. For example, I am able, to indicate that there will be the reappearance of events where suddenly an individual considered up to that point normal will massacre anyone using the first instrument of death which is at hand".

Do not the daily statements in the press show how prophetic these words were? And, regarding this, I recently read about a revolt among young people detainees at the penitentiary of Aniane in which the guards were astonished that this mutiny had occurred in January because generally negative events explode at the time of the equinox.

It is true that the equinoxes are the period where M. Rota passes his days and nights leaning over his apparatus because certain universal currents at that time reach formidable intensities. Are there not equinoxial tides? It is well verified, that this was exactly the time of his initial experiment at Marseilles that caused him to be knocked out several times. But I have to ask your indulgence with this devil of a man and his ideas; one is constantly dragged along despite oneself in many different directions.

I will voluntarily leave it others more qualified than myself that may care to expose the principles of other applications of his discoveries regarding the Universal energy rather than the results obtained. We have heard already of a motor that would replace our old and very expensive motors; why wireless and television suffer from atmospherics and how these could be radically suppressed; how it would be possible to prevent aircraft crashes; how one can discover now and without possible errors deposits of the ores of metals and oil at a great distance. It will be possible to realize many application of great interest, at this time, and above all to produce evidence to convince the most Cartesian among you.

Universal Currents and life

For now, I will limit myself to the role that, according to M.Rota, the universal currents play in the domain of life and animated beings, man in particular and how we can apply what we know in the study of illnesses and their treatment.

Given what is known of the universal currents it is tempting to study what influence they have on human life and it is no exaggeration to say that the consequences are immense in particular in connection with conception.

For M. Rota conception (not the birth) is due both to physical and chemical phenomenon, and the existence of these two phenomena are conditioned by the natural currents.

All formation or conception in the realm of the animal is a function of the simultaneous action of three currents: that of the male, that of the female and that of the place where conception takes place. The current of each of the parents called A for the male, B for the female is that which has the greatest intensity compared with all the other currents in the place and at the moment when each one was conceived. It is the dominant current which overrides all the others.
The current of the place C is that which exceeds in intensity all the others in the precise place and at the moment when the junction of the generators (sperm and egg) occurs.

If the intensity of A, B and C are equal at that moment of the act of reproduction, the chemical phenomena constituted by the union of the male sperm and female egg is able to occur. The first nucleus of segmentation is made, that is the first cell of new living being.

But if for example the density of A is greater than the density of B, there will be no conjoined action between the three forces but action of A on B and reaction of B on A, the phenomenon of life is blocked; there is no life.

The chemical phenomena, which are more particularly due to the effects of currents A and B have an effect on the organic and inorganic parts of the embryonic cell. The physical phenomena which allow chemical phenomena to be realised are under the intercellular influence of electricity, magnetism, heat and gravitation (cohesion) and is more especially conditioned by the current of the place C.

The living cell develops and dies under the influence of current C and one can detect this in practice; if C reacts on a living being (and one can clearly perceive these reactions) on a cadaver there are no reactions. Finally it is (apart from what the being gets from his father and mother) the current of the place at the moment of conception, which not only permits the latter , but also will have an influence on his /her development, normal or abnormal throughout his whole life.

In other terms, if the place and moment of conception are known, his/her characteristic current is known, that is to say that current on which his/her life and in consequence his/her health, physical and moral, will depend.

Furthermore if the place and time of conception of his/her mother and father are known, it is possible to determine the characteristic current of both of them and then determine the action of these currents on the characteristic current of their son/daughter, that is to say the atavistic influence of the currents.

I will remark in passing the light thrown by these theories on our confused knowledge regarding heredity and atavism, and consequently it illustrates another consequence no less important of the discoveries of M. Rota.

Knowing therefore the proper current of the person and its influences, and the favorable or unfavorable affect of atavistic influences, it is possible, at any instant of his life to check the variations of these currents and find out whether his/her health is normal or abnormal.

In effect, given the chemical and physical constitution of any organ (heart, lungs, stomach etc.) one can verify that when the organ is in a healthy state it reacts, for a given place of conception, on the current of the individual that posses it in a specific way.

M. Rota verified by experience that a healthy organ O reacts N times on its own current, and that the number of reactions, perfectly audible in a headphone (earpiece) is determined by the physical and chemical constitution of that organ.

In consequence with the aid of special apparatus one registers a certain number of reactions N' different from N one can conclude mathematically that the organ O is sick. This experimental verification is the basis of the examination which M. Rota calls mathematical (and to which I would like better to call Cosmo-Dynamism). Given that the method works and I have in great part verified the cases exactly that I submitted to him.

Now is the time to leave abstraction and make a tour of the facts. It is almost four years that through the intermediary of a common friend, Commandant Lachouque, I became acquainted with M. Rota and he described to me these medical theories:

"Your ideas. I said to him are, a priori, very strange. They run up against, in more than one point all that was taught me and all that I learned in thirty years of medical practice. But as I fully aware, and with me of the majority of sincere doctors, it is that I do not know everything. I am inclined to believe you on condition that that we place ourselves on the only ground where I can discuss with you check you regarding the method.

Come with me to the Red Cross hospital where I direct the anti-tuberculosis clinic. I will give you a number of ill people to examine. If with the aid of your method you give me their precise state which tallies with the diagnosis which I have myself have established using radiological examination and the various laboratory tests, then I will be convinced."

M. Rota accepted my invitation, but before going into it further I will give you an idea of the way in which he works.

He method as I have mentioned previously,

1. The subject under examination's own current and those of his parents are determined, as you will recall that these currents are determined by the place of conception and the current of each of parents. (The birth place has no significance)
2. The number of reactions operated by certain natural currents which traverse his organs on the current of the place,
3. The characteristic of each one of these currents.

These conditions being realized, he uses a certain number of apparatus which are made each of many metals which are needed for precision.

For M. Rota the universal currents assure the organic and inorganic life on the earth and certain of them are at the origin of all crystallization terrestrial or universal.

This has allowed him to determine how at the birth of our planet each one of the elements has been formed by the conjoined action of certain conditions and numerous currents, which enclose in consequence a quantity of energy due to action of those currents which have contributed to the elements formation.

In reuniting therefore particles of different metals and then submitting them to an appropriate treatment (which is rendered possible by his installation at Mont Saint Aignan, France) it is possible to awaken to some extent this latent energy in the metal.

Take for example a piece of copper. The copper is formed by the conjugate action of four currents C,D,E,F. If the energy contained in the piece of copper is awaked or revealed the natural currents C,D,E,F which traverse the piece of copper can be subjected to the action of other currents with which they are put in contact.
If the observer examines a subject, given that the current of the subject and his two parents are known, the observer puts the left hand of the subject in contact with say a block of copper in which the currents are awakened the observer can hear with aid of headphones connected by a conductor to an appropriate detector, the number, rhythm, the timbre and the intensity of these reactions furnished by the organs of the subject being explored on the current of the subject and on those of the block of copper.

In practice, the apparatus are multi-metallic. The operator has at his disposal a great number of currents and utilizes a sort of keyboard according to the part of the subject being explored.

The note, the number, and the particulars of the reactions are transmitted by the headphone. Having available a veritable gamut of metals, the procedure is to use the very numerous combinations to show the reactions of the different organs of the subject.

As he knows the characteristic normal reactions of the organs, it is easy for him by simple listening to find those of them which show a pathological alteration, also the degree more or less of the alteration. The study of the currents connected with the parents determined in advance, allows him to define further, if it is needed, the atavistic origin of any organic defects.

If the operator experiments, he can foresee other things besides, whether the illness will evolve rapidly or slowly up to the terminal point of the illness and similarly to specify the time it will take for its evolution to occur. That is thanks to the profound knowledge of the different characteristics of the different currents.

Let us return now to these concrete facts which may give you some rest from theory and also I hope enlighten you; because M. Rota and his apparatus, operative according to principles' which I have just tried to explain to you, and with the patients that I presented him with, gave me a clear demonstration of the cogency of his method. Not only without error on tuberculosis subjects, indicating the infected lung but furthermore the site of the lesion, said whether the latter was latent or active and even more remarkably the existence of a specific evolving illness in a young women that presented no symptoms, the existence of maculo-papules on the breast which he had not been able to see since the person was clothed, as in the case with all the other patients, and where I needed myself an examination of blood to ascertain with certainty the existence of this infection. Is this not an extraordinary result?

M. Rota does not play at medicine. He deliberately avails himself of all that constitutes the elements of medical diagnosis: Questioning, examination palpation, percussion, auscultation, use of the laboratory. The process of physico-chemical examination is absolutely original, and, you may ask how a medical method which deprived of the usual means of investigation could be capable of giving the sort of precision that he clearly brought to me.

He thus acted for me from these first contacts, with a rigorously scientific method, and the results of the first tests have been followed by others regarding illnesses that we have examined together for many years. But, it has to be said that this method only has value when applied by M. Rota. It has taken him many years to educate his ear to recognize the timbre, intensity of the 361 currents that he has identified, using a chronometer to note their delicate variations. If doctors desired to assimilate his methods, it would take them ten or twenty years to acquire enough virtuosity to get practical results.

This objection has not escaped either M. Rota or myself, and the transformation of the auditory method to a graphical method or some even simpler method will be studied with the hope of arriving at its realization. It is useless to insist besides on its possibilities which are evident. The interpretation furnished by such examination could be facilitated by the construction of a table put at the disposal of doctors, in order to avoid the complicated calculations and do as well as the inventor of this method.

I have arrived now at a more enthralling side to the discoveries that we summarize. I would like to mention the connection between the geographic orientation of life, racial origin and the treatment of certain illnesses. You already know that according to M. Rota a living being is placed under the “sign” of universal current which at the time and place of conception has the greatest density and intensity than all the other currents.

This is the current which gives the being life and which influences, for good or bad, the being for the duration of its life and contains the power for good or ill on its development. This action of the current of the individual is added to you, will remember, the currents of the two parents determined by the same factors.

In the course of life the influence of the currents or better, the result of these currents could somewhere be modified for good or bad by the influence of other currents from the place where the individual lives, attaining at certain times a preponderant density and intensity.

I must explain because this notion is of major importance:

Here is an infant which is born in Paris. His current, that which at his conception was dominant renders him susceptible to tuberculosis (I remark in passing that our current medical knowledge is pretty vague on the factors regarding susceptibility). On the other hand the current of mother and that of the infant atavistically reinforce this tendency. If the infant continues to live in Paris the two influences combine and at some later time will undoubtedly lead to illness.
But if the infant is moved to a certain point in Savoy for example where the action of a predetermined current acts to counter balance and dominate the effects of the infant's own current and that of the mother it will escape the fatal effects of the malady.

Very well, if (assuming the facts of the current of the mother are known) the conception of the infant occurs at a place and at a moment determined in advance under the influence of a favorable current, the menace of tuberculosis would no longer exist for him.

From these simple examples, which I hope are clear to you, as far as their innovation goes, it is not difficult to see facts which could be of enormous importance, arising out of the discoveries of M. Rota. It is evident, that with simple knowledge of the parents' currents, that it would be possible to determine the place and time of conception which would be favorable which would assure the health the infant and of its descendents.

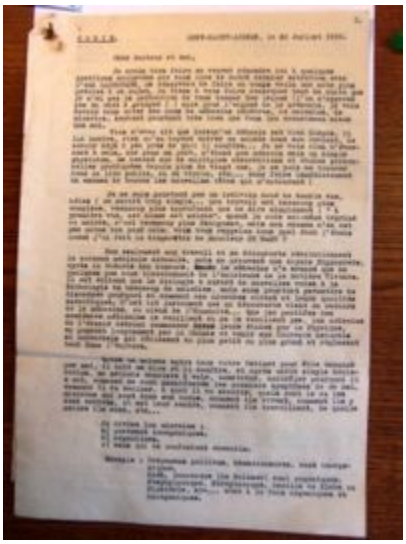
Then follows opinions about various medical matters not connected with Rota and of no importance here]

One has to admit that in the light of theories just exposed on the universal current, there is a current of rain or more exactly of precipitation and of cold and heat, all simple degradations of the natural energy. Furthermore, other meteorological phenomena are simple effects of the interactions of the universal current we do not see, that they act constantly and at the same time the perturbations which have a cosmic cause, also have their influence on human and animal life. It is therefore necessary to look for a favorable universal current.

At this point Dr. Kresser recounts how Rota successfully cured him of an acute form arthritis, by using a special mattress in which the metal springs were treated, but this does not further our knowledge of Rota's methods other than what has already been described
End of Dr. Kresser's article
Diagnostic sheet

More on Medical Applications

This gives more detail than Dr Kresser's article quoted above. Rota actually associates the current number with various bacteria etc but also the metals. The numbers are his and arbitrary, but since he uses these throughout and in other areas as well the relationship between metals and numbers is important.
I have translated this note a closely as I can because it gives a much more practical view about how Rota actually went about diagnosis. The attribution that many diseases were syphilitic in origin seemed to have been current between the wars and Rota seemed to have picked that idea up. He does not necessarily always mean an active physical "bug" but rather a sort of taint, historical, genetic(atavistic) in origin, which is present as a universal current.
Translation



Dear Doctor and Friend,

I believe it well to respond here to some questions brought up at the time of our meeting with friend Lachouque, I have reserved necessary time to make a note more precise on this subject I make a point of making remarking immediately that I do not pretend to give you lessons (one does not teach a cat how to climb) but for the present expose, I will have to quote you names of well known physicians, diseases, microbes knowing nevertheless very well that you understand these better than me.

You have told to me that when a physician is well experienced it will come by just looking at a sick person in his consulting room to know more or less what is suffering from.. I never see anything amazing like that, because for my part not being a physician but a simple physicist I base mine on more than twenty years of multiple observations and study, personal and practical.

I am not a person endowed with clairvoyance, unfortunately! That would be too simple… My work is much more complex, very much deeper than saying simply "at first sight that man is ill". When I am myself depressed or ill this is very much more tiring but my examinations are by no means good for that; you will recall what state I was in when I made the diagnosis of Monsieur W.?

Not only my work and my revolutionary discoveries in current medical science, but I have proved that since Hypocrates, after the thesis of the humors, medicine has not advanced more than a little way and without discerning the existence of living matter. It is evident that biology opens up new ways in the pathology of many illnesses, but without, nevertheless, being able to discern the why and how of these living microbes and their specific qualities. It is rightly here that my discoveries come to the help of medicine, or better humanity which the pontiffs of the medical academies want or do not want the physicians of the future to have to commence their studies by way of physics, passing at length through chemistry and coming to the natural and universal currents which build the smallest and the biggest and direct everything in the universe.

When a sick person comes to your surgery in order to be examined by me, I ask him to tell me what his problem is, and after that simple statement, my method consists to look, verify check why he is ill, how the first symptoms of his illness

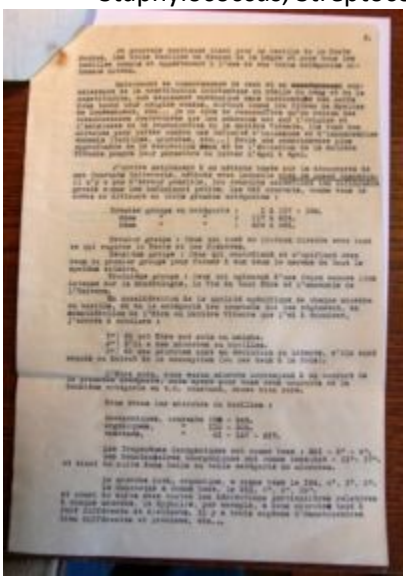
manifests, how it has developed and how it has ended up, which the microbe(s) are in his body, how they live, how did they arrive, where is their center, how are they working, of what nature are they etc…

I group the microbes

- a) Purely inorganic
- b) Organic
- c) Those that are mixed together

Example :

- Trepomena pallidum, Hematozoaires, are inorganic
- Koch, Gonococcus (Neisser) are organic
- Staphylococcus, Streptococcus , Bacillus of Klebs or Diphtheria etc are some organic and inorganic.



I could continue further for the bacillus of Bubonic Plague, the three bacillus of Nansen, Leprosy and all known bacilli belong to one of the three categories above noted.

Now knowing this and in the knowledge of the intrinsic constitution or reality of blood and of the constitution not solely anatomical but intrinsic in the nerves in all their known origin above all about the fibers of myelin of Leuwenhoeck, etc. I have to recognize because of the restricted knowledge of physicians on the origin and the existence of reproduction in living material, they make the miracles for the struggle against the infinity of unknown and imponderable enemies (bacillus, microbes etc.) Only a very deep understanding of the derivation and the evolution of living matter are we able to fight on equal terms.

I have arrived now at my method based on the discovery of my universal currents, method with which nothing can pass undetected; there is no error possible. These currents control the infinitely big as well as the infinitely small. The 361 currents that we know are divided into three categories:

- First group or category : 1 to 117 – 153
- Second group or category : 117 to 216
- Third group or category : 210 to 361
- **First group**

That is connected directly with everything regarding the earth and planets.

Second group

That which control and unite with those of the first group to form between the two the movement of the whole solar system

Third group

That which acts in a very intense way on minerals, life and all beings and the ensemble (or coordination) of the universe. In considering the specific qualities of each microbe or bacteria and of the category of currents to which they belong in consideration of the Being or living matter which I have to examine I conclude:

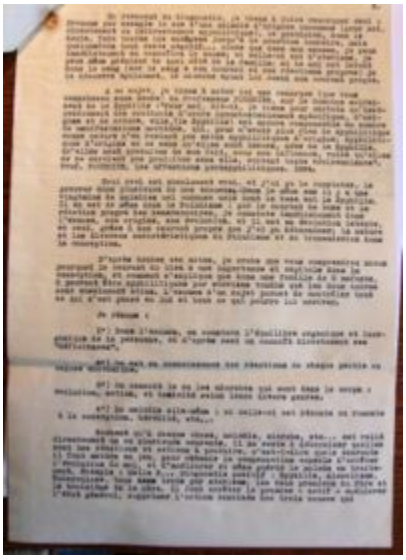
- 1) If this being is healthy or sick
- 2) If he has a microbe or bacillus
- 3) If this microbe are developing or are latent, acquired or dated to the moment of conception or both.

A healthy being without any microbes corresponding to a current of the first category but having as base two currents of the second category in t.d.(?) constant are very rare. We have the microbes or bacillus:

- Inorganic currents 158 - 249
- Organic currents 110 – 203
- Combined currents 81 -147 – 217.

The inorganic trypanosomes have as base the current 231 – 3” – 9”
The Hematozaires inorganic have as base current 246 – 223 – 17”
And further the groups of such and such category of microbes.
The organic Koch microbe has as base 164 – 4” – 1” – 3”
The conocoque microbe has as base 151,- 8”, - 3”, - 19”

And further the group with all the derivations particulars and relatives of each microbe, Syphpilis for example has two microbes both of which are different and distinct.



There are three species of hematozaires very different etc.

Relevant to diagnostic, I will make this remark:

Taking for example the case of an illness of unknown origin (for me, directly or indirectly syphilis), the practitioner in doubt will perform every analysis including a lumbar puncture, but sometimes all results are negative. Now, in my examination I am able immediately to understand the cause; it is that of atavism, I am even able to specify which side of the family; whether the illness is latent in the blood (because the blood and its current have their own appropriate reactions), I can discover equally the microbe, it also having its own appropriate current. Regarding this subject, I take note of a remark (which you undoubtedly know) of Professor Fournier, on the harmful effects of syphilis. “For me, he

said, I hold it for certain that independent of the illnesses incontestably specific in origin and of a syphilitic nature, it is undoubtedly responsible for a number of morbid manifestations, which are not of a syphilitic nature but are none the less syphilitic in origin, and in this sense they are under its influence, since it seems likely that they will not occur without it".

Prof. Fornier; Les effections parasyphilitiques. 1894.

All this is absolutely true, and I have been able to verify and prove it in large numbers of my examinations. In the same manner there are about twenty or so illnesses badly understood but whose root is syphilis. It is similar in malaria by the base current and the appropriate reaction for hematozoaires, I can verify immediately on examination its origin, its development, and if the development is latent, and this thanks to its own current from which I have been able to determine the nature and the diverse characteristic of malaria and its transmission through conception. After all these notes, I believe you will comprehend better why the current of the place is of capital importance in conception and how it is explained that in a family of five children three can be syphilitic by atavism and the other two can be absolutely healthy. The examination of a subject allows me to check all that has happened to him and all that will come to him.

I continue

- 1) I examine and verify the organic and inorganic balance of the person and after that one knows directly his deficiencies.
- 2) One has knowledge of the reactions of each part of an anatomical organ.
- 3) One knows the location of the microbes in the body, their development , action and Toxicity according to their different types.
- 4) The illness itself if is recent or at the time of conception, heredity etc.

Knowing which of each thing, illnesses, microbes etc are connected directly to numerous currents. It remains to determine what are the actions and reactions they produce, that is to say which current has to be put in play in order to obtain the compensation capable of arresting the development of the illness and ameliorate or better cure it.
Example Malle N.. Diagnostic positive: syphilis, alcoholism, tuberculosis , all three being atavistic in origin . The first two from the father and the third from the mother. I have to arrest the first, ameliorate the state in general, suppress the combined action of the three which give a toxin due to the different microbes. Syphilis , current 231 I put against the currents 168-189 Chrome [metal]. Koch current 164 I put in reaction with currents 150 163, Silicon and so on. Next I balance the working of the two with the block of Cu [copper], Zn[zinc], Fe[iron], Sn[tin] Pb[lead], that is to say with the appropriate currents of these metals.

With the mattress, [the special mattresses had springs made of different metals and alloys] we obtained the following results.

- 1) After 10 days the pain started to diminish

- 2) After 25 days the pain disappeared completely, the hip is less inflamed and the general state of health has improved.
- 3) After 5 month she was walking without any difficulty.

With the block connected to the mattress

The general health is completely restored, all the problems have disappeared and maintained after 18 months of treatment despite being 47 years old. This person is capable of working without fatigue each day for 6 hours from 10 am to 11 pm at night. I have to say that this illness has been observed scrupulously all my directions during the course of the treatment.

My dear friends, today I cannot expand further on this vast subject; I believe that you have already there what to reflect and of how to respond on the multiple questions of your fellow-members. Excuse me if I have not explained to you as clearly as I thought. But you have M. Lachouque to open the door where you find it closed, because until now he is the only one to have followed and understood the work of

Your devoted friend

L.G.V.Rota

P.S In addition to this document here are some BASE CURRENTS of different metals

	Current of the base	Metal	D
1	333	Pt	21,5
2	324	Au	19,32
3	301	W	19,3
4	289	Hg	13,26 -15
5	279	Pb	11,37
6	281	Ag	10,05
7	203	Bi	9,80
8	252	Cu	8,39
9	261	Sn	7,29
10	189	Cr	7,1
11	270	Zn	1,1
12	171	As	5,73
13	163	Si	2,3
14	162	Mg	1,74
15	159	Ca	1,55

MISC. DOCUMENTS

Ce— Ct— Dy—
cerium Ceticum Dysprosium

Lu— Le— Gd—
lutecium Lecium Gadolinium

Ho— La— Se—
Holmium Lanthane Sudoricum

Od— R— Sa— Yt.
Didymium Rasidium Samarium Yttrium

Yb. Tm. Yb
Ytterbium Thulium Ytterbium

14·2·25

Standard of Power no 1.

For Theoretical part
Knowledge of the Eng.

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Gold	5772	37	an	= 2·432		£1

Dysprosium

14·2·25

9	10	11	12	13	14
Num P. P².	N. Cl. Kp m. (1)	N. R. b. (3)	G=C (3)	Cost in mm +.	Ab. Pt. (1)
17	18	19	20	21	22

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PROF. L. D. V. ROTA

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Remarks

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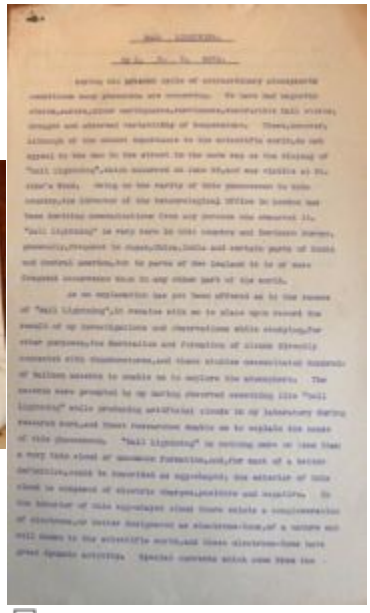
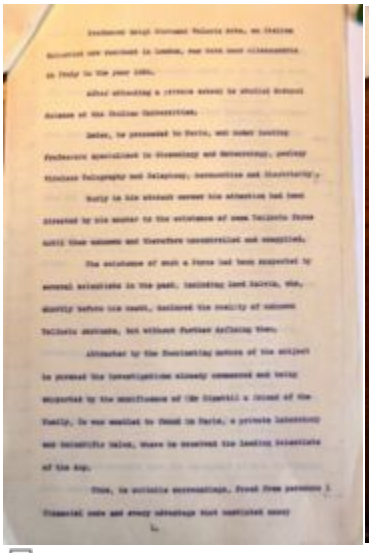
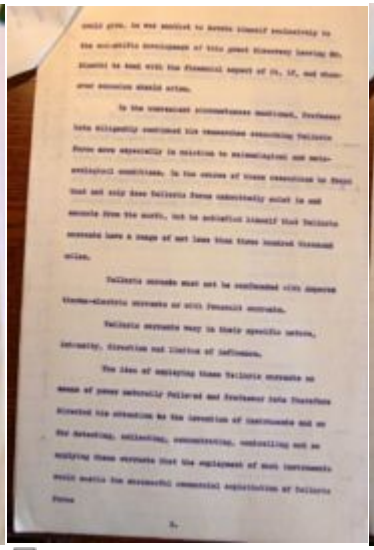
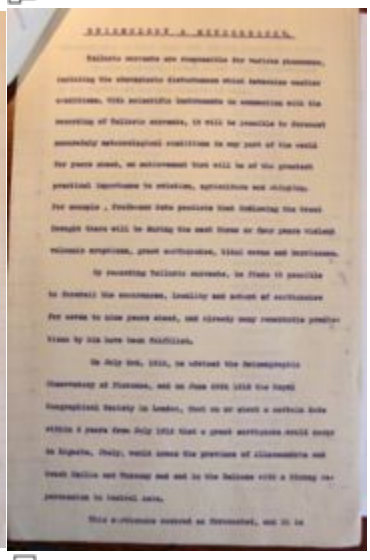
Considerations

January 1930

The Irish Home Rule Question



LINKS

Nathan Stubblefield
Cecil Maby and Bedford Franklin
Mysteries of Ground Radio
More on Zenneck and Surface Waves
G.J.E Goubau: Surface Wave Transmission line; US Patent 2,685,068
G.J.E Goubau: Launching and Receiving Surface waves; US Patent 2921277
Characteristics of unexplained ground ELF Signals
Aero Radio Balistique, REX Research
Introduction to the work of Louis Rota
US Navy patrol squadron, NS Rota
Re: Louis ROTA Levitation Apparatus

- Questions/Answers
- Notes
- Sites of interest referenced in the above pages

- An Introduction to the Mysteries of Ground Radio (courtesy of Gerry Vassilatos from http://www.borderlands.com)
- Rediscovering the Zenneck Surface Wave
- http://web.mit.edu/redingtn/www/netadv/zenneck.html

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- **[3] D. A. Hill and J. R. Wait**

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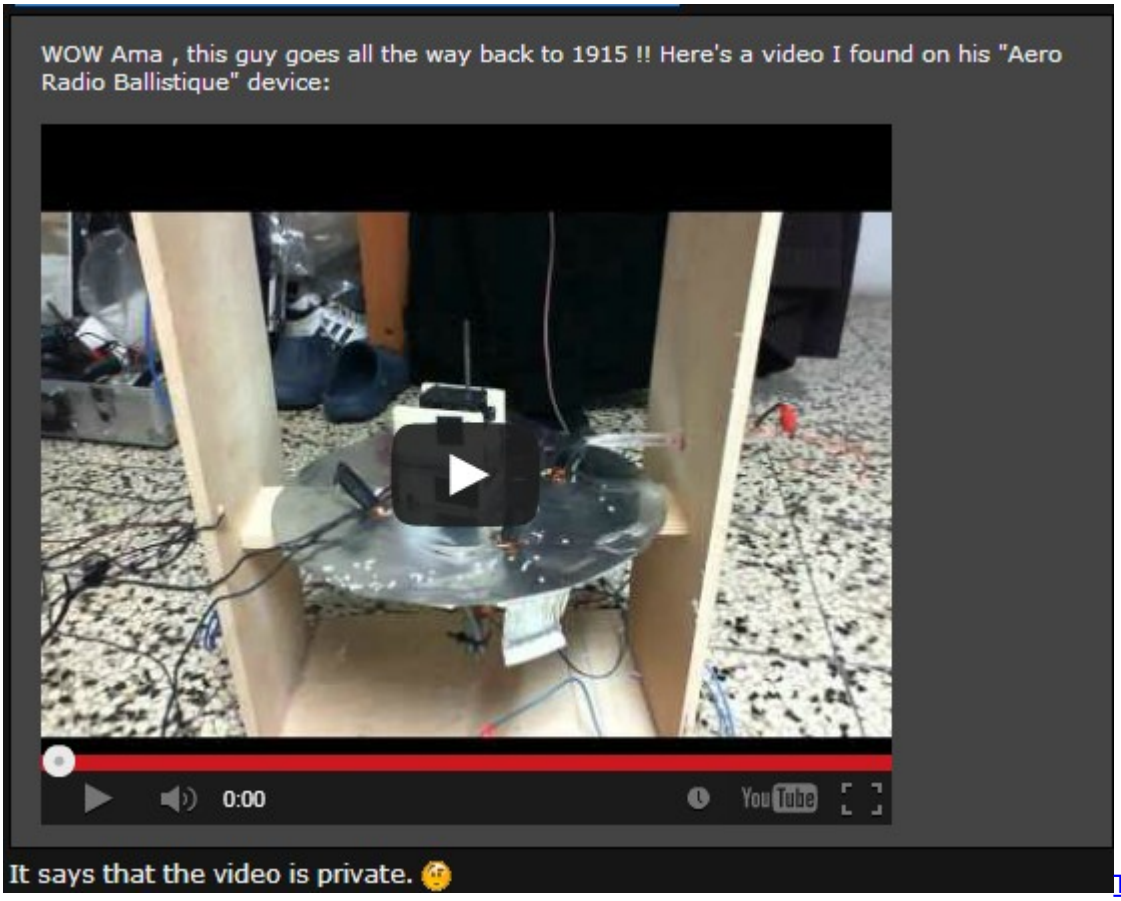


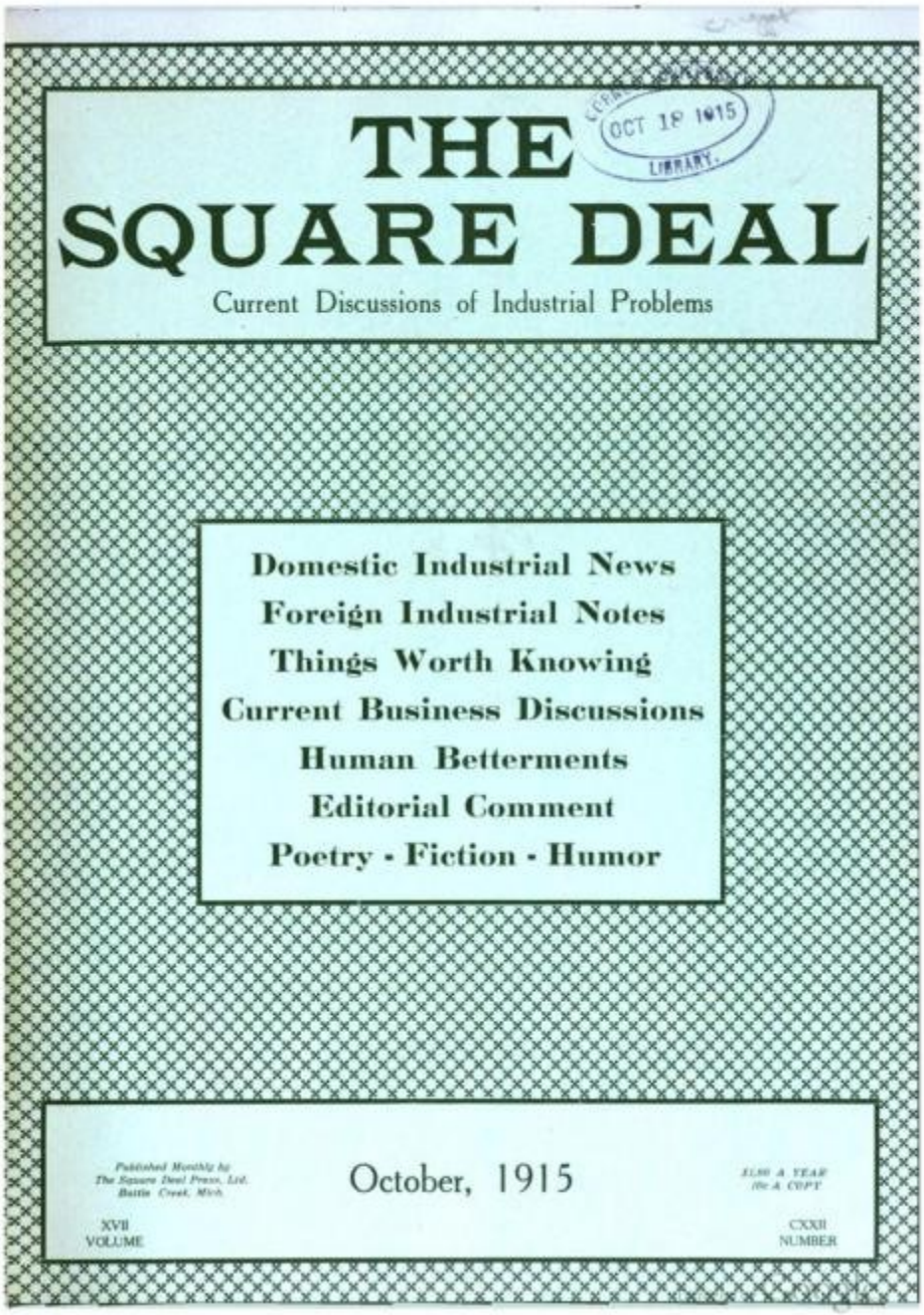
This replica has nothing to do with work of Louis Rota.

I would say work of Louis Rota is very close to work of John Ernst Worrel Keeley.

An Engineering Mystery From 1915

Update: *See end of post for link to original patent.*

As seen from prior posts where I've published rare writings from Napoleon Hill, and an article about a telegraph geek, it's worthwhile to dig through old magazines at Google Books.



This morning I was looking through issues of *The Square Deal* from 1915 and came upon a very intriguing blurb.

Italian Solves Problem of Holding Objects Motionless In Air

An Italian engineer, Louis Rota, has solved the problem of holding an object motionless in space, according to the Marseilles correspondent of Petit Parisien. Rota is credited with having constructed an apparatus which, by the action of electric currents, can be elevated to a height of from 2,000 to 3,000 feet and kept motionless, or propelled in any direction at a speed of more than 100 miles an hour.

Rota's apparatus is spindle-shaped, twelve feet long and two feet in diameter and can carry a weight of ninety pounds. It is said to remain motionless in a wind of considerable velocity, but if the wind becomes very strong it rises automatically until it reaches a calmer region of the air. The invention is based on reactions obtained from the electro-magnetic forces of the atmosphere.

There is another possibility that Baumann discovered something similar to Louis Rota (wikirota.org/en). Rota claimed to have discovered an energy in the earth similar to earth currents which he called "universal currents". They are similar to electric current except they will decompose metals. There over **361 of these different currents** and groups of them flow in the earth's crust.

According to Rota each metal consists of a group of universal currents locked together, so for example copper consists of four universal currents locked together and iron seven or eight different currents.

If any metal is put in contact with one its component currents by for example burying it in an area in which the current exist, the metal will slowly dissolve yielding all its component currents as a group. These released currents can be in high or low potential depending on the metal but can yield enormous energy.

I was involved i digging up a Rota block in France many years ago and a lot of what was found is on the wikirota site. To some up, there appears to be another way in which metals can be disintegrated yielding energy. High voltages appear to be the way of starting the process of dissolving metal into universal current rather than the nuclear form we are used to.

Rota block.jpg (115.93 kB, 1380x681 - viewed 659 times.)