GERNSBACK Hugo

(1884 - 1967)

Luxembourg-city

Patents (details)

1 - Nécessaire de voyage à réclames

FR patent	335648
Application date	30 September 1903
Patent owner	Société GERNSBACHER et Cie (Belgium)

La présente invention se rapporte à un nécessaire de voyage dont chacun des objets peut porter une ou plusieurs réclames.

Ce nécessaire se compose essentiellement d'une couverture de voyage dont l'une des faces ou dont les deux faces sont munies de réclames. Ces réclames peuvent être imprimées ou brodées directement sur l'étoffe de la couverture ou être appliquées sur des bandes d'étoffe que l'on coud ou que l'on fixe d'une manière quelconque à la couverture.

Cette couverture étant convenablement pliée on l'introduit dans une housse semblable aux taies d'oreillers généralement employées, de façon à ce que l'on puisse utiliser la couverture comme oreiller. La housse peut porter, comme la couverture, une ou plusieurs réclames sur l'une ou les deux faces.

La couverture et la housse sont soigneusement enfermées, avant la vente, dans une enveloppe en papier, tissu ou autre, munie d'un timbre ou d'un cachet, de façon à assurer à l'acheteur que ces objets n'ont pas servi auparavant. Cette enveloppe peut aussi être couverte de réclames.

Il est loisible d'ajouter dans l'enveloppe cachetée ou timbrée, d'autres articles de voyage, tels que boîte à savons, flacon d'odeur, brosses, peignes, casquette de voyage, guides d'hôtels, etc., ces articles pouvant également porter une ou plusieurs réclames.

(no drawing)

2 - Papier de toilette à réclames

FR patent	337115
Application date	12 November 1903
Patent owner	Société GERNSBACHER et Cie (Belgium)

L'invention a pour but d'utiliser le papier de toilette généralement employé dans les water-closets, etc., à la réclame.

Les réclames peuvent être imprimées directement sur le papier dont on se sert à la toilette, ou sur une bande de papier perforé également, et qui contournera le premier rouleau, de manière que, entre chaque feuille de papier à toilette, se trouvera une feuille imprimée de réclames et perforée, qu'on peut détacher et emporter.

L'invention s'applique également aux papiers en blocs ou en distributeurs.

(no drawing)

3 - Battery-cell

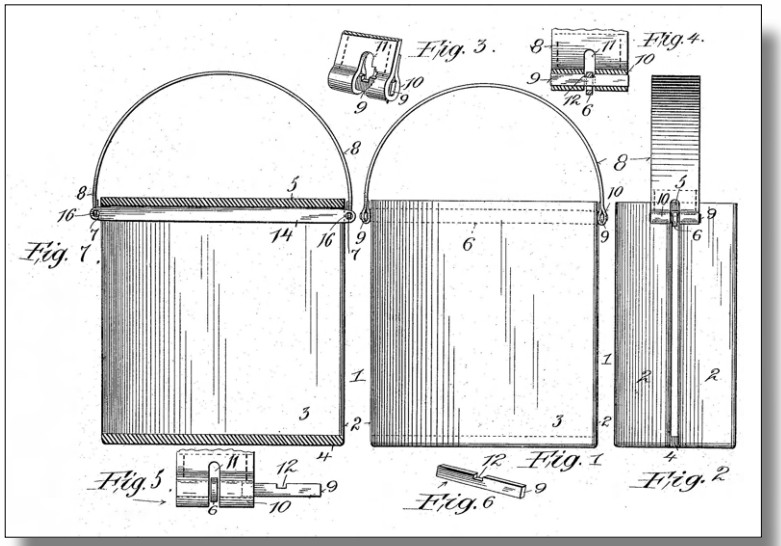
US patent	842950
Application date	28 June 1906
Inventor	GERNSBACK Hugo
Patent Owner	Royal Battery Company (New York)

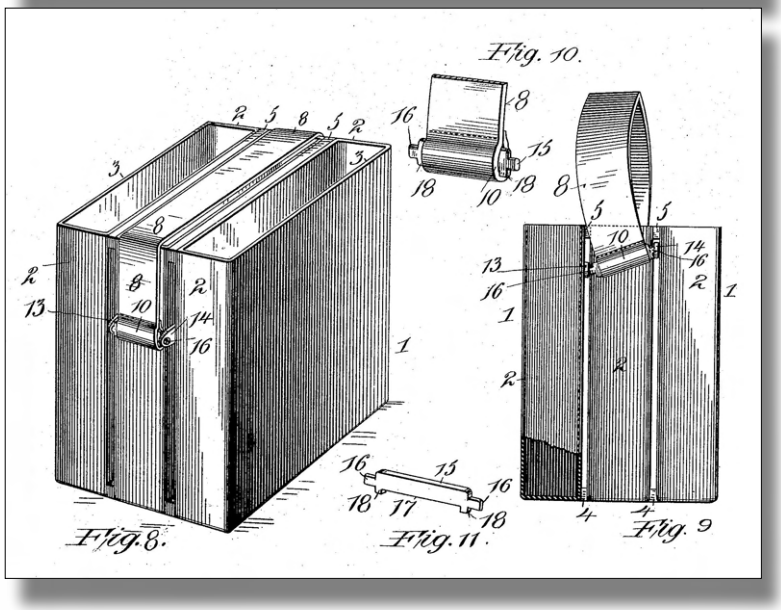
The object of my invention is to provide cells which are spaced apart, so as to have a space between them, in order that there will be no electrical transmission between the cells in case of a defect in the making and also to provide a suitable carrying-handle without having to have, a carrying-receptacle for the cells. The handle is also secured so as to be removable and so that it will take up very little space and may be pressed down close to the cells when not in use.

… Heretofore it has been customary to place the cells in another receptacle for carrying, but which is made unnecessary by my invention, making the same more economical and easier to handle.

…For two cells, as is shown in Figs. 1 and 2, I provide a flat bar ***6****, which is long enough to extend the length of the cells, and it is placed between the two cells. There should be slight friction between the bar and the cells to hold the former in any desired position. The bar is provided at each end with an aperture* ***7*** *(illustrated in Fig. 7) in the end of bar* ***14****.*

For the purpose of carrying the cells I provide a strap ***8****, the ends of which are secured to the bar on each end of the cells by a pin* ***9****, The ends of the strap are formed with loops* ***10*** *and preferably a recess* ***11****, the former being adapted to have the pin passed therethrough. The pin is provided with a recess* ***12****.*





4- Incandescent lamp

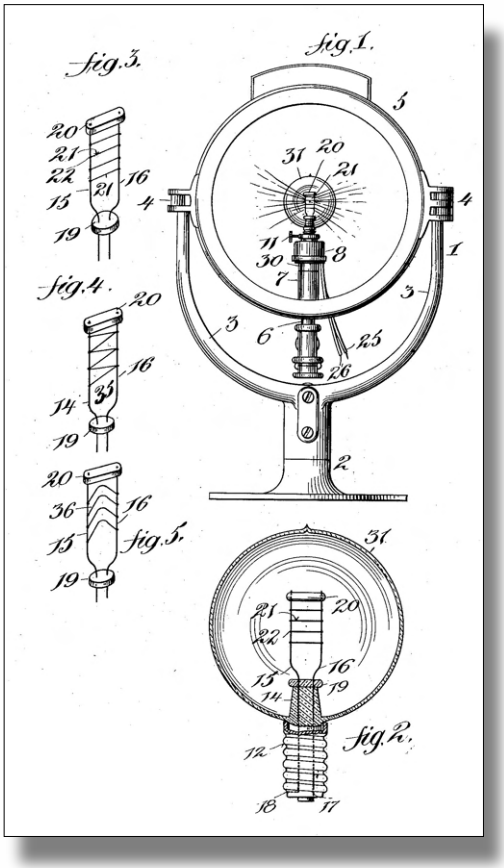
US patent	902069
Application date	12 March 1907
Inventor	GERNSBACK Hugo
Patent Owner	MOTOR CAR EQUIPMENT COMPANY, US

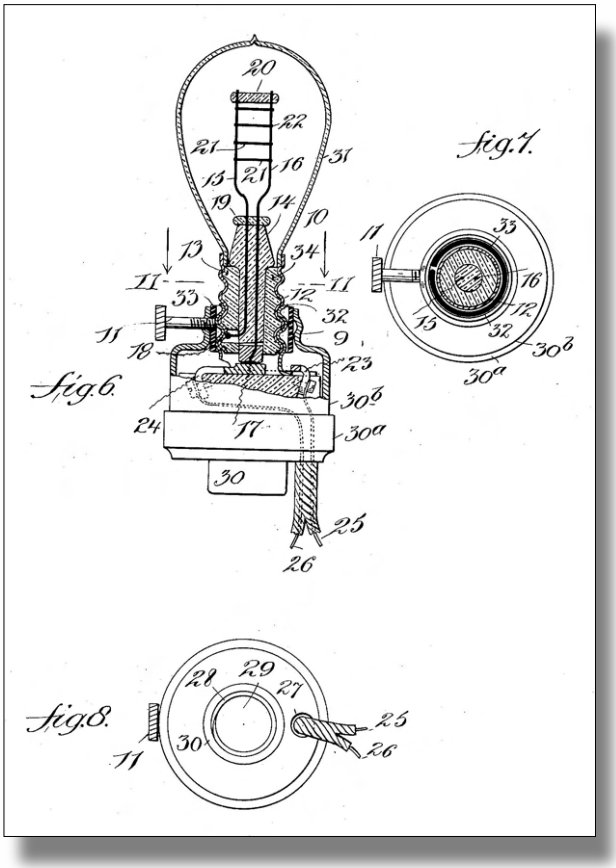
My invention relates to incandescent electric lamps such as are commonly used for electric lighting, and especially those used for automobiles, boats, etc., where storage batteries are used, and where it is desired to attach an electric lamp in a gas lamp whereby the lamp may be interchangeably gas or electric.

I provide a lamp which is so made that no light is wasted by side reflection when used for autos and the like, and wherein a light of sixteen candle power may be burned from an ordinary storage or chemical battery having a very low voltage. Instead of requiring 106 or 110 volts, my improved lamp will produce a 16 candle power light for headlight purposes, from the ordinary batteries carried by automobiles, boats, etc. Heretofore only small lights could be worked from such batteries, and motorists have been compelled to rely generally on acetylene as a headlight illuminant.

Another result of my improvement is that there are several filaments and one or more may burn out and the lamps will burn as long as there is one filament remaining. This is highly important in uses for which my lamp is adapted. The light, it will be understood, is reduced when a filament is burned out, but there will be some light until the last filament burns out. This feature is also important in burning lamps in series.

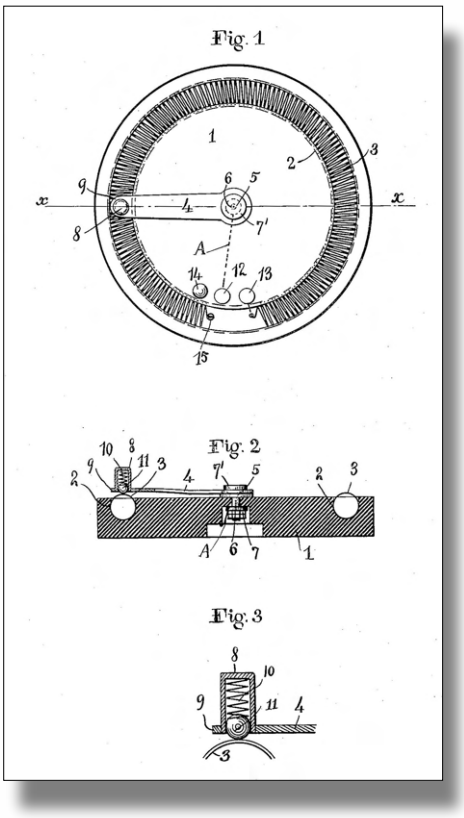
My improved lamp when many are used, may be strung in series or parallel and are equally adapted for both purposes.





5- Electro-rheostat regulator

US patent 948275
Application date 1 September 1908



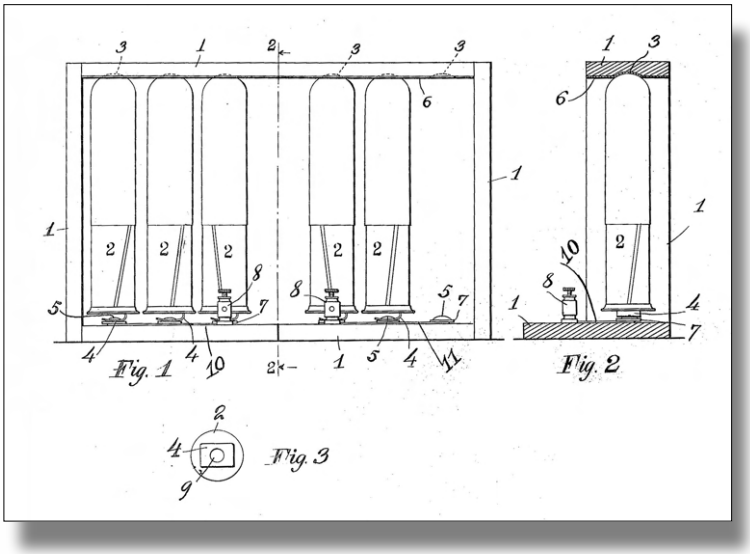
My invention relates to electro-rheostat regulators and the provision of means for carefully and accurately regulating the flow of current in any electric circuit by gradually cutting in and out part of a resistance coil composed of numerous convolutions of wire, and in which resistance coil a variation is obtained by means of a movable spring-seated ball bearing contact point, which engages the upper exposed surface of the resistance coil with a minimum amount of friction. My invention, however, is more particularly directed to the form and construction of the base and in the manner of holding the resistance coil in place by means of an uninterrupted annular undercut retaining groove with a sufficient opening at the top thereof to enable the coil to be sprung lengthwise into, position lengthwise.

Among the objects of my invention is the provision of a simple, efficient, small-sized and compact rheostat, in which there are no concealed parts and which by reason of its construction and mode of operation will insure a gradual and almost imperceptible regulation of current. My improved rheostat possesses great current capacity, and produces little or no heating because the parts are open to the air and are therefore air cooled.

Another object is to provide a resistance coil composed of numerous convolutions of wire and which coil is hollow. The resistance coil has an extremely wide range of resistance in a very small space, and is of simple, practical and inexpensive construction and by reason of being hollow produces a maximum amount of ventilation and reduces the heat to a minimum.

6- Electro-adjustable condenser

US patent 951788
Application date 9 January 1909



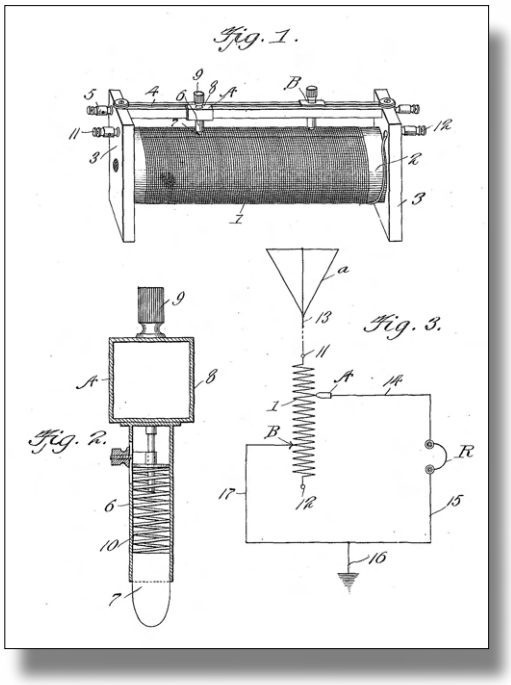
This invention relates to electro-adjustable condensers, which consists of a plurality of Leyden or other jar condensers, for use in connection with commercial wireless telegraphy, and also for use in connection with the conducting of experiments of all kinds in wireless telegraphy and in all high tension work, for the purpose of changing or varying the capacity of the electric circuit.

One object of this invention and of my improved construction is to enormously increase the sending radius of a wireless telestation, by increasing the length of duraton of the oscillations of the waves across the spark gap, as well as rendering the waves considerably more powerful.

Another object is to provide an inexpensive electro-adjustable condenser with a maximum simplicity of construction and of correspondingly high efficiency, and, by reason of my improved construction, the capacity of which may be increased or decreased by simply snapping into or pushing or pulling out of operative position in the frame, one or more Leyden jars, or other condenser jars.

7- Detectorium

US patent 961855
Application date 5 February 1910



This invention relates to the art of wireless telegraphy and telephony and has to deal more particularly with an instrument which I shall term a " detectorium ", the principal object of the invention being to combine in a single instrument means for tuning the antenna and for acting as a detector for ordinary Hertzian waves.

Another object of the invention is to provide a slider of a tuning coil with a contact element which slides over the convolutions of the coil in tuning the antenna and which, by bearing on the coil, acts as a detector, the material best suitable for this being found by experiment to be silicon, although other materials of analogous nature may be used.

In the accompanying drawing, which illustrates one embodiment of the invention:

Figure 1 is a perspective view of a tuning coil combined with a detector.

Fig. 2 is an enlarged sectional view of the slider for the tuning coil showing the detector thereon.

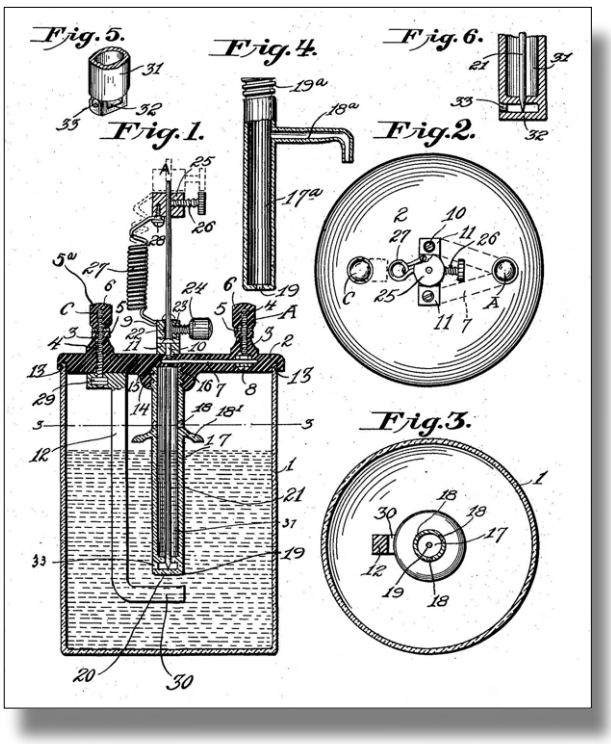
Fig. 3 is a diagrammatic view of the wireless receiving station with the combined tuner and detector included therein.

8 - Electrolytic interrupter

US patent 988767
Application date 12 February 1910

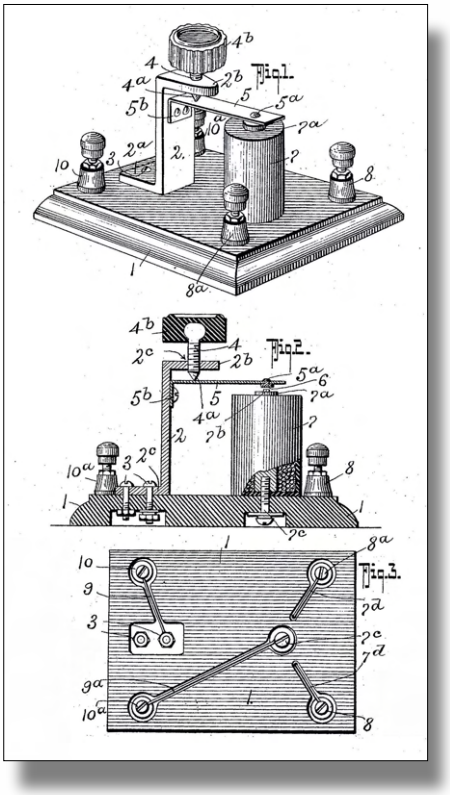
This invention relates to high frequency interrupters, generally known as electrolytic interrupters, and has for its object the production of an interrupter, which can be adjusted so as to regulate the frequency of the breaks therein.

Another object of this invention is the provision of means for facilitating the holding of the anode in its proper place within the insulated tube.



9 - Relay

US patent 978999
Application date 14 March 1910

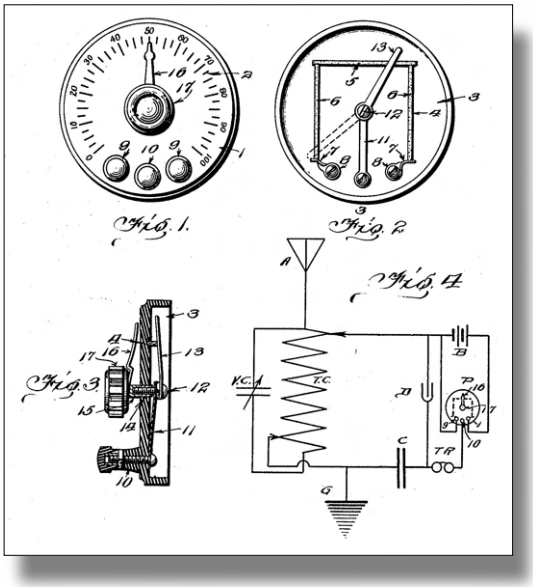


My invention is a new and improved relay particularly designed for use in telegraphy and more particularly useful in those systems of wireless telegraphy wherein coherers and de-coherers are employed. In the systems of telegraphy referred to the great difficulty encountered in practice is to provide a relay that will be sufficiently sensitive to respond to very weak impulses (such as arrives at a receiving station from sending stations a great distance away), and yet will be of an inexpensive nature, simple in construction and operative under adverse conditions, such as arise in places subject to much vibration.

My invention therefore has for its object to provide a relay as free from the objections noted as possible, and one which will embody the advantageous features such as extreme sensitiveness, operative under all conditions usually met with in practice and of an inexpensive construction. To this end I provide a base on which a standard is mounted to which a horizontally held leaf spring is attached at one end. The standard carries an adjusting screw which bears on the spring and through which the tension of the spring may be regulated and the distance between the local circuit contacts may be adjusted. The relay magnet carries one of the local circuit contacts and the armature carries the other.

10 - Potentiometer

US patent 988456
Application date 7 December 1910



This invention relates to potentiometers and to that class used in wireless telegraphy, having for its object to provide a simple and compact device to control and regulate the resistance in electrical circuits.

*In Fig. 4 of the drawings, I have shown a diagrammatic view illustrating the application of the invention to a wireless system in which **A** indicates the aerial, **VC**, the variable condenser, **TC** the tuning coil, **D** the detector, **G** ground, **C** condenser, **TR** the telegraph receiver, **B** the battery and **P** the potentiometer, the wiring in which figure is of the usual construction in wireless telegraph.*

The operation of the device is obvious from the diagram of Fig. 4, that by proper connection with the circuits of the wireless system and battery, any potential may be caused to pass through the receiver by simply turning the thumb piece.

11 - Combined electric hair brush and comb

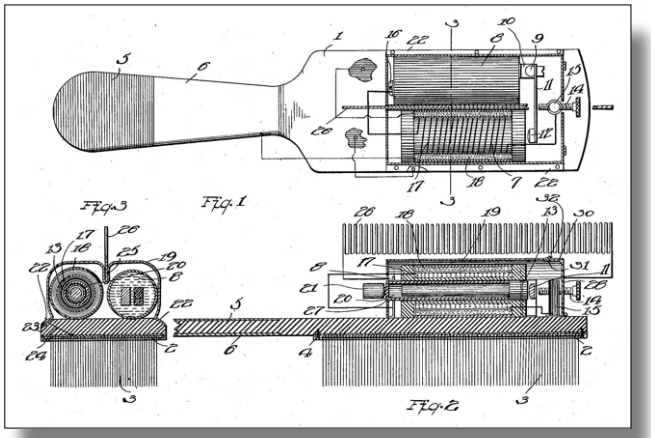
US patent	1016138
Application date	12 September 1911

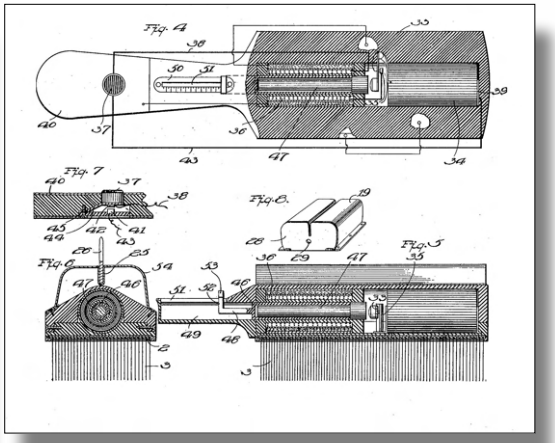
This invention relates to electric brushes and massage instrument combined and has for its object the production of a brush which is capable of securely holding a comb upon the back thereof so as to be in the electric circuits with the other portion of the brush.

Another object of this invention is the production of a brush which may also be used as a massage instrument.

What I claim is:

An electric brush comprising a back having a series of metallic bristles, an induction coil carried by said back, a battery associated therewith, a contact plate carried by the handle of said brush, a housing inclosing said induction coil and battery being provided with a comb receiving socket extending longitudinally thereof being electrically connected to said bristles and induction coil and said contact plate and induction coil being electrically connected to said battery.





12 - Rotary variable condenser

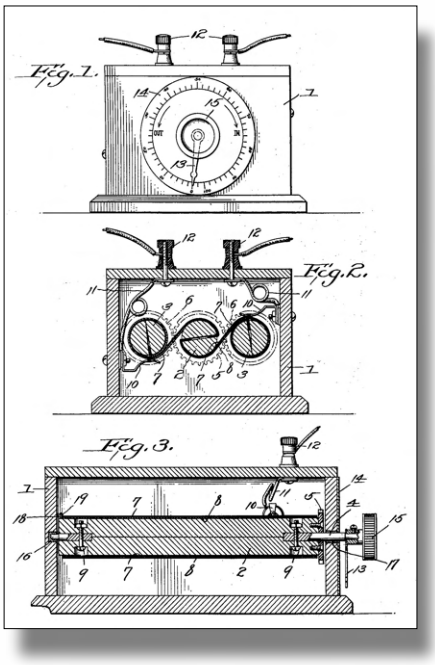
US patent	1033095
Application date	1 March 1912

The present invention relates to a variable condenser which is more especially designed for use in connection with wireless telegraphy and telephony, and which is also adapted for use in the other electrical arts in which such condensers are used.

The object of the invention is to provide a variable condenser which has a rotary adjusting movement, which is very compact in its construction, which can be easily and quickly manipulated, and which is peculiarly designed so as to render short circuiting practically impossible.

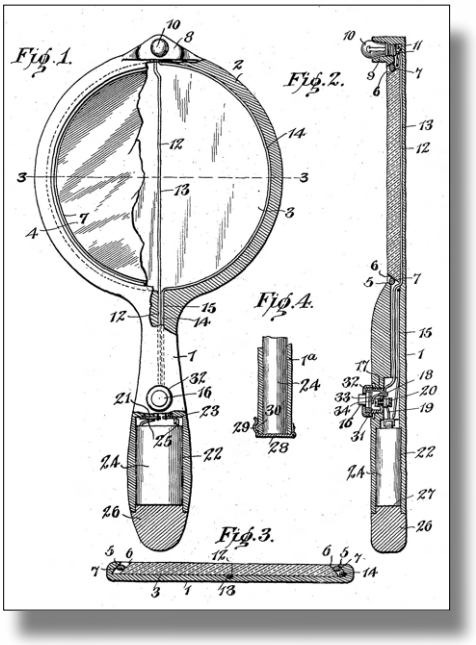
The present variable condensers which use intermeshing plates with air dielectric are very bulky owing to the fact that the plates can never approach each other very closely, and are also unsatisfactory owing to the fact that they are liable to get out of repair and much leakage is caused.

With the present construction these objections are avoided, since no plates with sharp edges are used, and the parts are simple and work with little friction or wear, thereby rendering the device very durable and long lived.



13 - Luminous electric mirror

US patent	1057820
Application date	18 January 1913

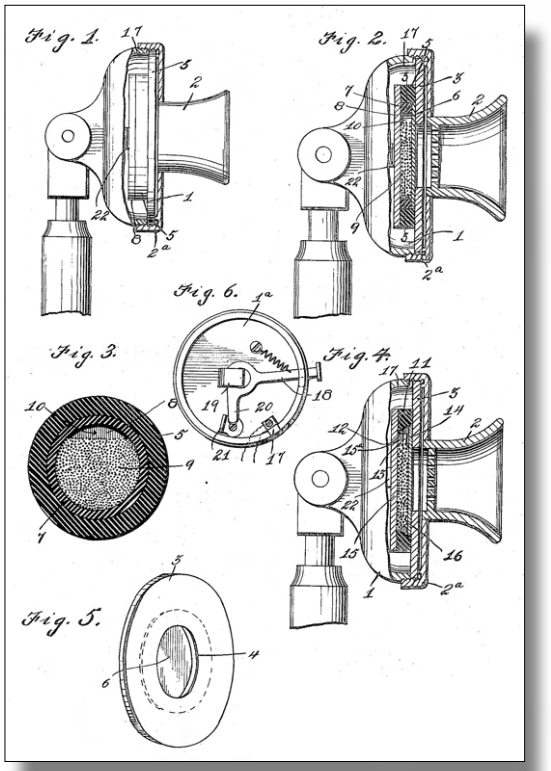


This invention relates to hand mirrors and has for its object the production of a simple and efficient mirror which is provided with an electric light for the purpose of illuminating the mirror when so desired.

Another object of this invention is the production of a simple and efficient means for supporting the battery and conducting wires in compact relation upon the body of the mirror.

14 - Transmitter

US patent	1124413
Application date	15 May 1913



This invention relates to transmitters and has for its object the production of a simple and efficient transmitter which may be manufactured at a minimum cost and which may be readily attached to a telephone without the necessity of binding screws and the like as now in common use.

Another object of this invention is the production of a simple and efficient transmitter which may be held upon the mouthpiece of a telephone in a vertical position.

With these and other objects in view, this invention consists of certain novel constructions, combinations and arrangements of parts, as will be hereinafter fully described and claimed.

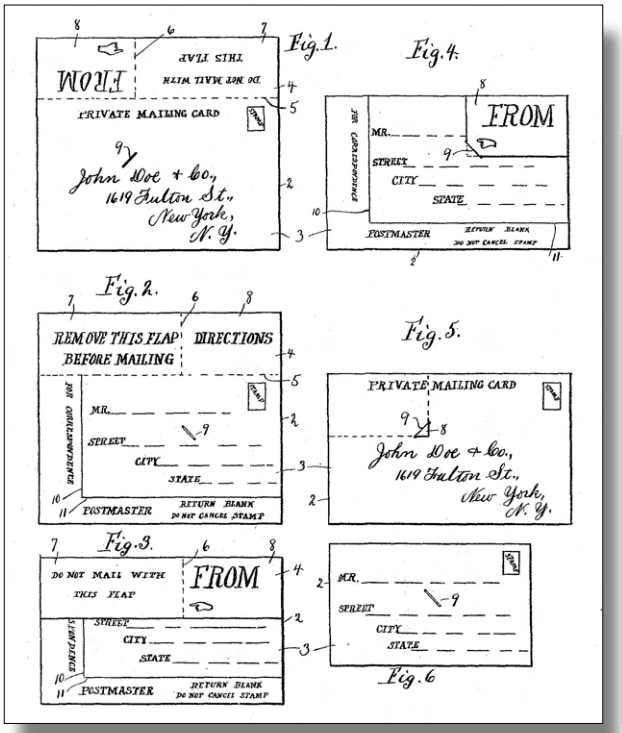
15 - Postal card

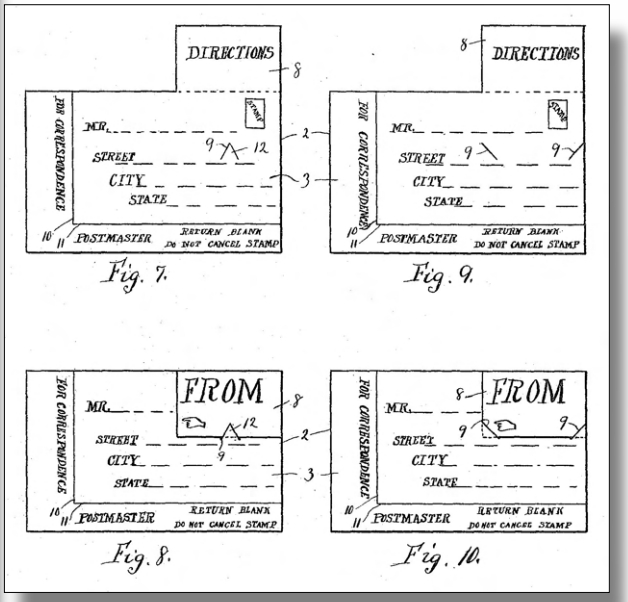
US patent	1209425
Application date	15 May 1916

My invention relates to new and useful improvements in postal cards, and more particularly to the class known as return postal cards, and has for its object to provide a device of this character, with a protecting flap which can be secured without additional fasteners for protecting the stamp on the reverse side of the postal card.

A further object of the invention is to provide a postal card adapted for use by advertisers which is sent to prospective customers who may send the postal card if the concern's literature is desired, with the name and address of the person desiring said literature, said postal card having a portion projecting from the upper edge, one part of which is removed by the person desiring the literature, the balance being folded over to form a flap, the corners of which are inserted in the body of the postal card, and beneath this flap may be placed a stamp, cash, money order or other object,

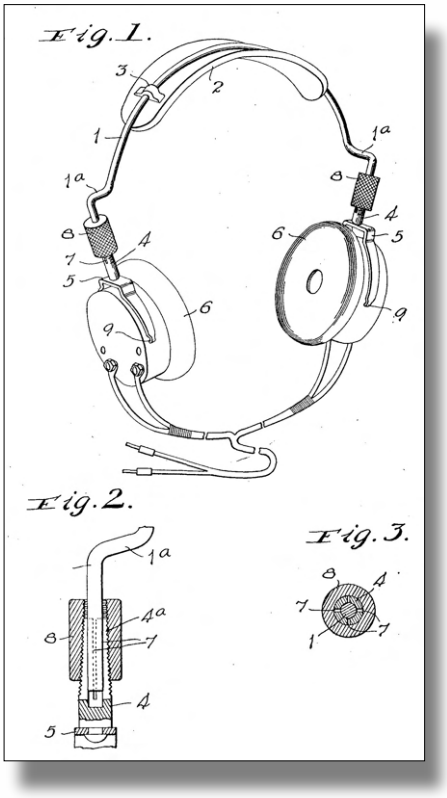
A still further object of the invention is to provide a return postal card, which will contain the name and address of the person desiring the literature of the original sender as well as the postage for carrying the literature through the mail, so that when said postal card is received by the original sender, it is only necessary to paste the same upon the wrapper of the literature, thereby overcoming the necessity of having to write the address, and preventing mistakes in transcribing, and saving considerable time and expense.





16 - Telephone-headband

US patent	1329658
Application date	21 April 1917



The present invention relates to a simplified style of headband which is designed to replace the old style double spring headband, and which embodies novel features of construction whereby it can be easily and quickly adjusted to fit the head with accuracy, and can be worn without any discomfort.

Further objects of the invention are to provide a telephone headband which will hold the receivers to the ears perfectly and exclude all outside noises, which is light in weight and will not catch in the hair, which is simple and inexpensive in its construction, and which prevents any metal from touching the head, thereby avoiding shocks and leakage. …

*The yokes **5** are shown as provided with inwardly extending fingers **9** which pivotally engage diametrically opposite openings in the sides of the receivers, thereby leaving the receivers free to turn, about, a horizontal axis and fit themselves properly to the ears of the wearer. This headband will not catch and tear the hair, as all double headbands do, and it can be worn with the utmost comfort, since the soft rubber pad **2** prevents the wire headband from coming into contact with the head, and prevents the single round wire from slipping on the head. The rubber pad also provides a large bearing surface upon the top of the head and thus makes the headband practically as secure on the head as the double headbands in common use. The headband is practically invisible when in position upon the head, and is not clumsy and unsightly, as are the complicated and cumbersome double headbands.*

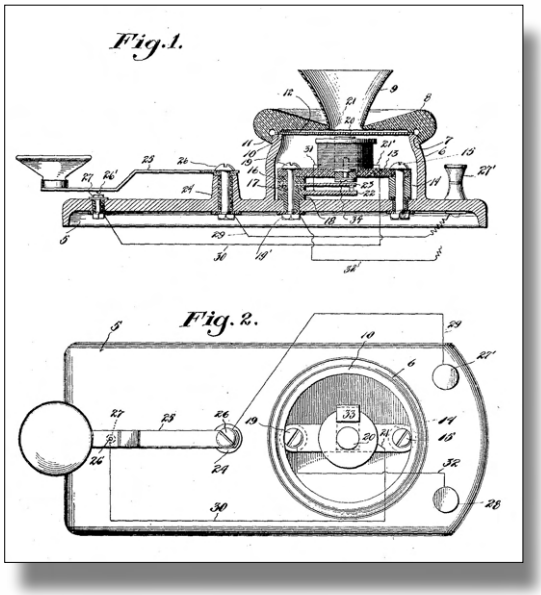
17 - Electromagnetic sounding device

US patent	1354389
Application date	11 December 1917

This invention relates to mechanisms for practising telegraphy and more particularly for use in practising wireless telegraphy wherein the signals have a degree of continuity as distinguished from the sharp clicks from the ordinary telegraph sounders.

In the present apparatus, each depression of the key results in the vibration of a diaphragm in synchrony with a succession of electrical impulses of a duration corresponding to the length of time the key is held depressed. The result is a sound similar in quality to that given out by the wireless telegraph receiver, but many times amplified.

The result is accomplished by placing a diaphragm in the field of force of an electromagnet, in the circuit of which and of a sending key, is a make-and-break mechanism entirely independent of the diaphragm but actuated by the same electro-magnet.



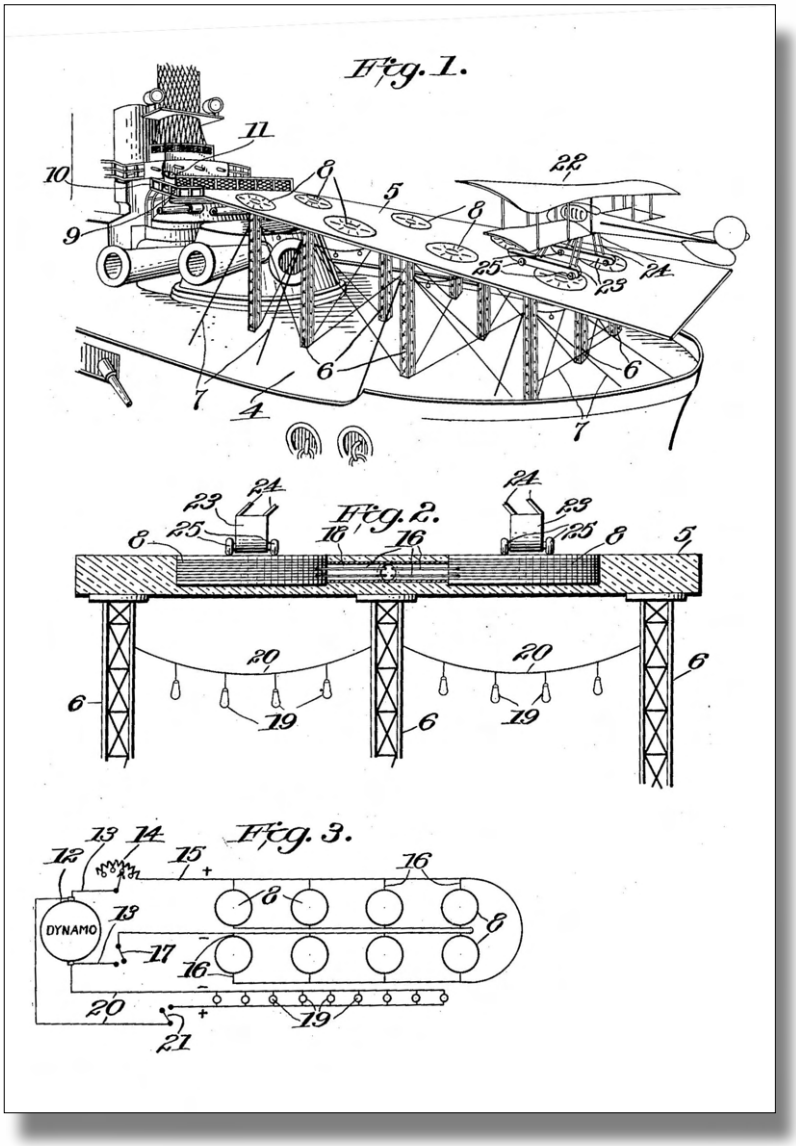
18 - Apparatus for landing flying-machines

US patent	1392140
Application date	20 May 1918

My invention relates to landing mechanism for aeroplanes or other flying machines and to the process of effecting the landing.

The main object is to provide a means whereby flying machines may alight from all directions gradually, smoothly and without shock to the machine or its occupant and be held securely in place until lashed or otherwise fastened. Many theories and mechanisms are known which have resulted from unsuccessful attempts, to satisfactorily accomplish this object. At the present time where a large open field cannot be used, the most feasible plan is to provide a runway or platform which is necessarily so restricted in area, especially in width and usually in length too, (this is especially true on ships) that the most experienced aviators consider it so difficult to control the machines while alighting as to be impractical. Many accidents now occur during bad weather in landing, on these runways.

In carrying out my invention, I overcome the objections noted and use a means which exerts a tractive force on the flying machine while still in motion to gradually retard or brake its momentum and attract and hold it securely for lashing to a support, and preferably employ said means as a plurality of separated units so that the attractive force will not concentrate at a single point, but will be divided among the separated units. Further, electro-magnets, are used .as the attracting means and are mounted in a glass platform or landing space, serving both as an insulator for the magnets and as a means which may be illuminated .by the use of search or other lights to assist in effecting landings during darkness. The landing surface of the platform or space is to be lubricated or treated so that a flying machine may slide or travel thereon without unnecessary friction, wear and noise.



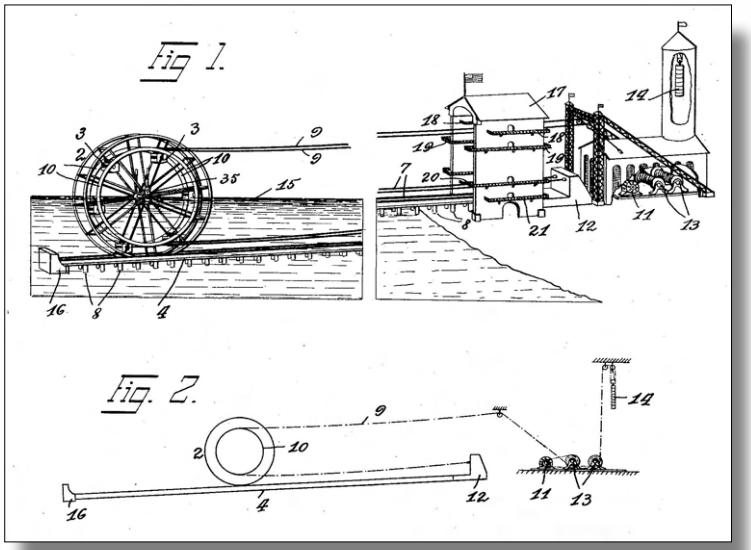
19 - Submersible amusement device

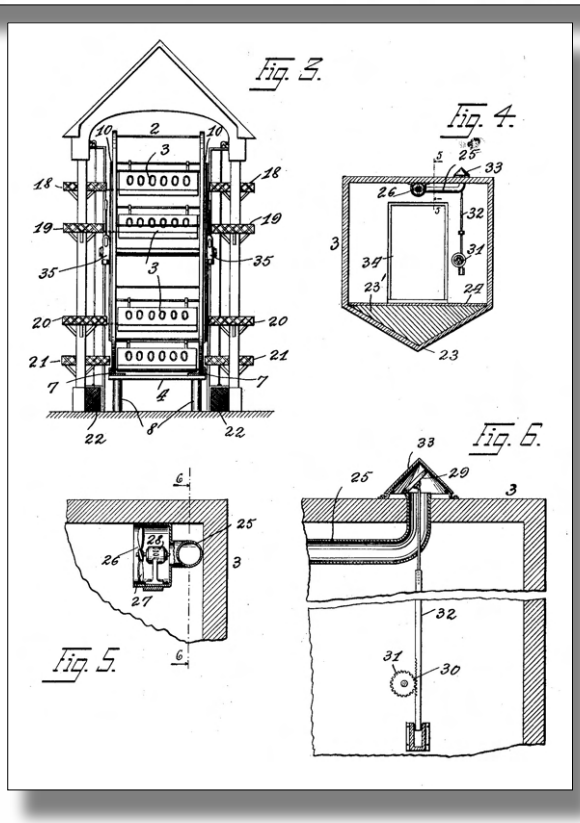
US patent	1384750
Application date	22 November 1920

This invention relates to a submersible amusement device, and the main object of the invention is to provide an amusement device in the form of a Ferris wheel adapted to travel along an inclined track, part of which is submerged, to bring all the passenger cars of the wheel into and out of the water at regular intervals during the progress of the wheel down and up the track.

A further object of the invention is to provide means for rapidly loading passengers on all the cars of the device simultaneously at the beginning of each trip, and unloading all cars simultaneously at the end of the trip.

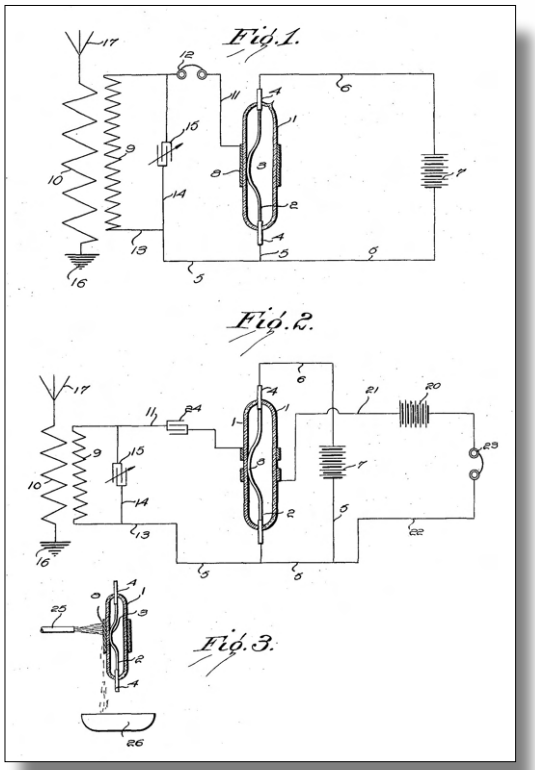
Another important object of the invention relates to ventilating means for the watertight, submersible cars of the device.





20 - Electric valve

US patent	1488337
Application date	14 May 1921



This invention relates to improvements in electric valves commonly known as audions.

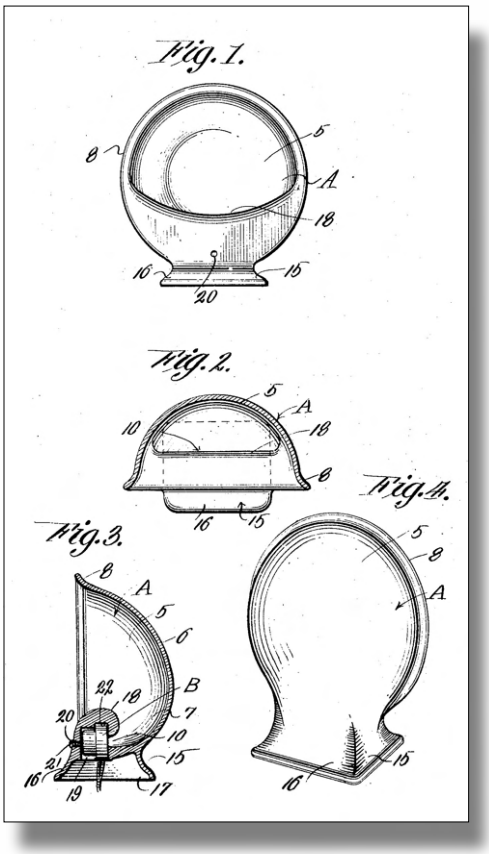
The objects of the invention are to increase the efficiency and sensitiveness of said valves, and to produce a more simple construction than heretofore employed.

I have found that a filament heated to red or white incandescence in contact with the wall of a highly exhausted glass bulb produces a remarkably high current between the filament and an outside external electrode. The electronic flow is made to pass between the filament and the outside element, although these two elements are not in metallic contact.

Under the heat of the filament, the wall of the glass vessel becomes a conductor which allows the electronic charge to pass.

21 - Radio horn

US patent	1560684
Application date	27 October 1922



This invention relates to acoustics and the primary object of the invention is to provide a novel horn for loud speakers of radio telephony -receiving sets, which is so constructed that the distortion of the sound waves, the forming of echoes, and other extraneous noises will be effectively eliminated.

Another object of the invention is to provide an improved horn for radio telephony and telegraphy receiving sets, in which the sound waves are permitted to Sow without hindrance- directly from the receiver into the atmosphere, the horn serving as an effective means for amplifying the sound waves,

A further object of the invention is to provide a horn for radio receiving sets, which can be conveniently and expeditiously cast from a suitable material, such as aluminum, at a minimum cost, and which will be durable, and efficient in use.

A further object of the invention is to provide novel means for associating the receiver with the horn, whereby the receiver can be easily and expeditiously connected with or removed from the horn and in which the receiver will be protected from external blows.

A still further object of the invention is to provide novel means for mounting the receiver within the horn body by a single screw and so that the diaphragm. thereof will be disposed in a vertical plane and in direct alignment with the volute passageway of the horn, whereby the sound waves will be permitted to flow directly into the horn body and be amplified to a great extent.

22 - Detector

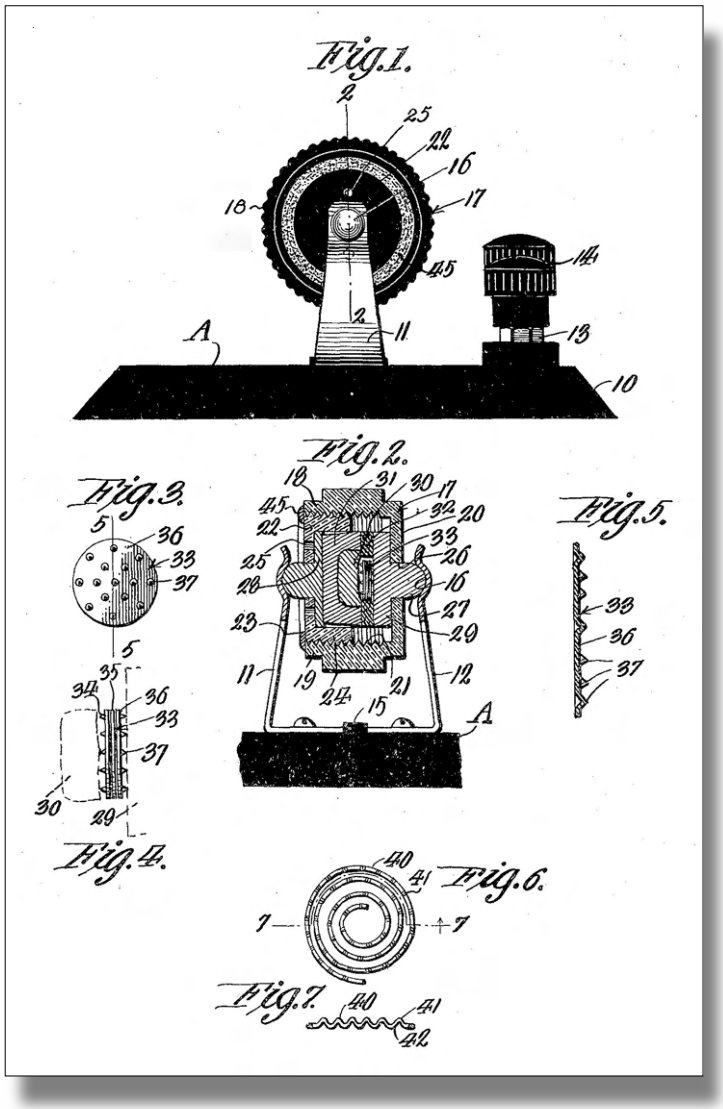
US patent	1496671
Application date	24 February 1923

This invention relates to radio apparatus and more particularly to detectors of the crystal type and the primary object of the invention is to provide an improved detector, which will operate efficiently under all conditions and in which a good contact between the "feeler" and the crystal is established at all times.

In crystal detectors of the ordinary type, a feeler wire or a "cat-whisker," as the. same is commonly called, is utilized for finding and establishing contact with a sensitive point on the crystal. The single feeler wire or "cat-whisker" is usually knocked out of contact by the impact or vibration and it then becomes necessary to hunt all over the surface of the crystal again to find a new sensitive point.

It is therefore another prime object of the invention, to provide a detector in which the above mentioned difficulty is eliminated and in which the single feeling wire or "cat-whisker" is disposed with and a feeler member substituted therefor having a plurality of feeling or contact points for engaging a plurality of different places on the crystal, so that if one point is displaced from out of engagement with a sensitive spot on the crystal, other feeler points will automatically engage other sensitive spots on the crystal, whereby a crystal detector is provided which works permanently, as has been actually found to be the case in practice.

A further object of the invention is to provide an improved crystal detector embodying the usual crystal, an annular compression gasket, feeler plates disposed in the compression gasket for engaging the crystal and means for adjusting the plates in relation to the crystal, until the proper pressure between the plates and crystal is established.



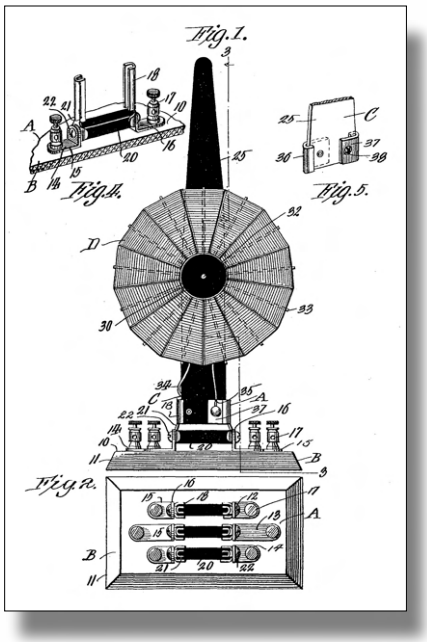
23 - Coil mounting

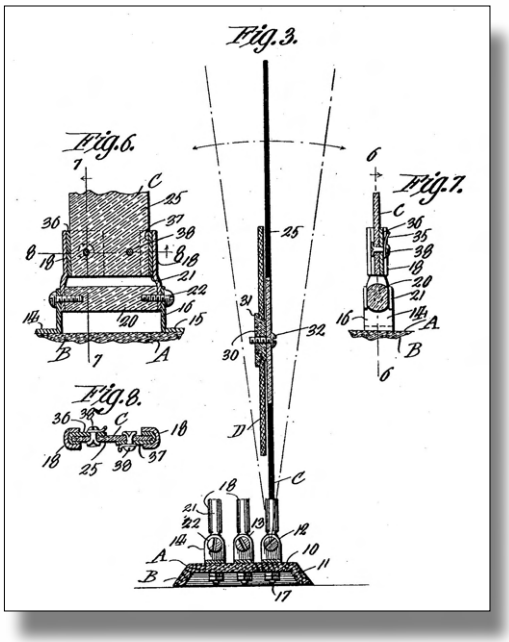
US patent	1558604
Application date	24 February 1923

This invention relates to coils for radio work and the primary objects of the invention are, first to provide novel means for mounting the coils proper in place, and second novel means for associating the coils proper with the base, whereby the coils can be readily put in or pulled out of the circuits.

Another prime object of the invention is to provide a coil embodying a base provided with a plurality of novelty arranged sockets, so disposed as to permit the swinging thereof, and novel elongated handles or blades upon which the coils proper, preferably of the spider web type, are mounted, the sockets permitting the adjusting of the coils, in relation to one another.

A further object of the invention is to provide novel means for mounting the spider web coils proper upon the handles or blades, each blade or handle having a plug formed of insulating material detachably connected therewith for receiving the spider web coils, the reinforcing element of the spider web coils engaging the plug, whereby displacement thereof is precluded, the blades or handles carrying novel contacts for engaging the sockets.





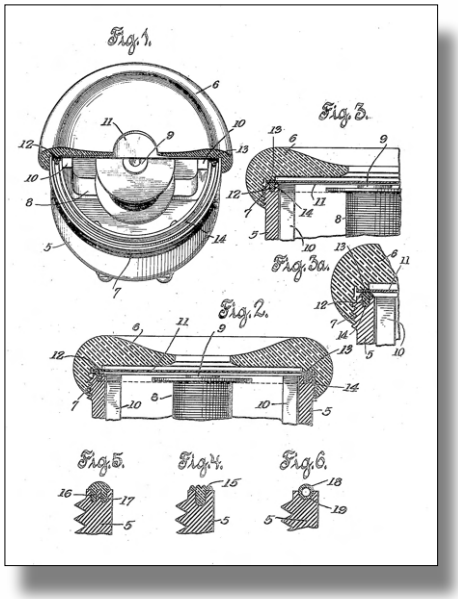
24 - Tuned telephone receiver

US patent	1478709
Application date	17 March 1923
Inventor	GERNSBACK Hugo
Patent owner	Radio Industries Corporation (New York)

In the use of telephone receivers, particularly for radio purposes, it has been found that the best results are obtained when the two receivers of a head set are matched in tone.

One of the important objects of this invention is to enable the matching or pairing of the receivers in a simple and practical manner and in a way which can be readily performed after the receivers are assembled in condition for use.

Another important object of the invention is to provide a receiver particularly suited for loud-talkers and capable of adjustment to allow for increased action of the diaphragm resulting from "loading" of the actuating magnet.



25 - Acoustic apparatus [1]

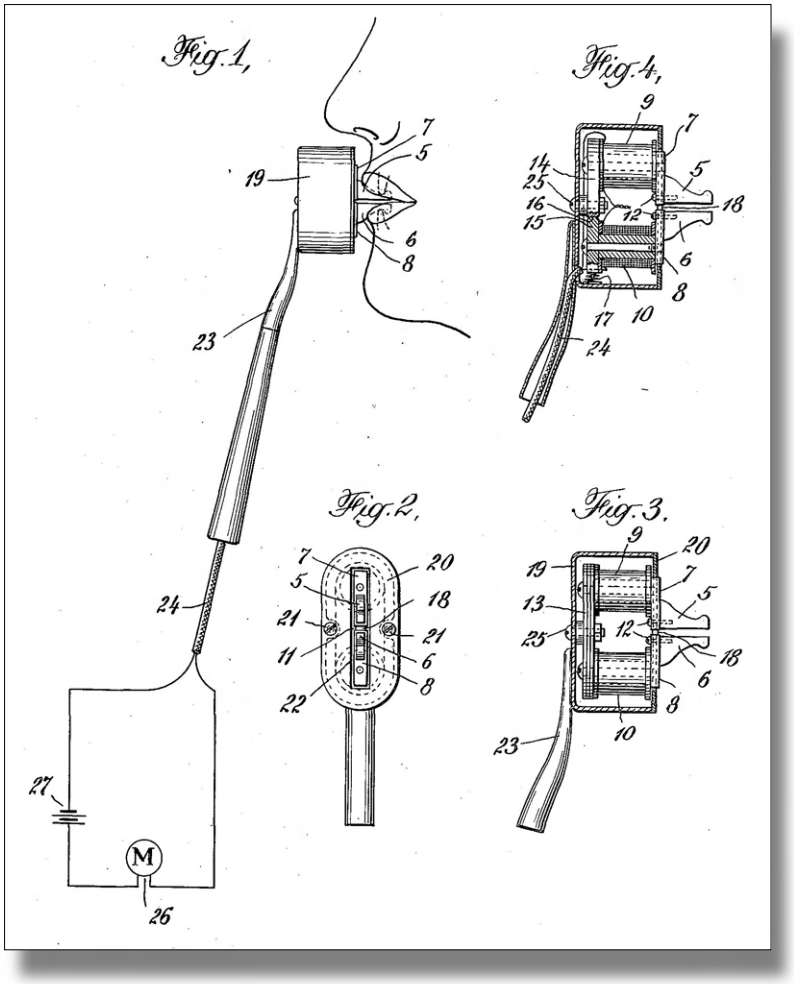
US patent	1521287
Application date	19 May 1923

This invention relates to acoustical instruments and the important objects of the invention are to provide simple and practical means by which hearing may be effected by sound vibrations transmitted directly to the osseous tissue of the body. A particular purpose is to provide such means in the form of a small, compact and handy instrument which can be easily carried about and used without attracting undue attention.

In the accomplishment of the foregoing I have constructed an instrument having relatively small bit pieces adapted to be gripped between the teeth and which are directly carried by the polar projections of a small electromagnet connected with a microphone or other suitable sound sensitive mechanism. …

*The vibration transmitting or osseous engaging members are shown in the form of separated bit pieces **5**, which may be tapered and grooved as shown to enter readily between the lips and fit against the upper and lower teeth of the user. These bit pieces may be constructed of hard rubber, fiber or other good vibration transmitting material and are preferably made as small as possible so as to be inconspicuous and not uncomfortable in use.*

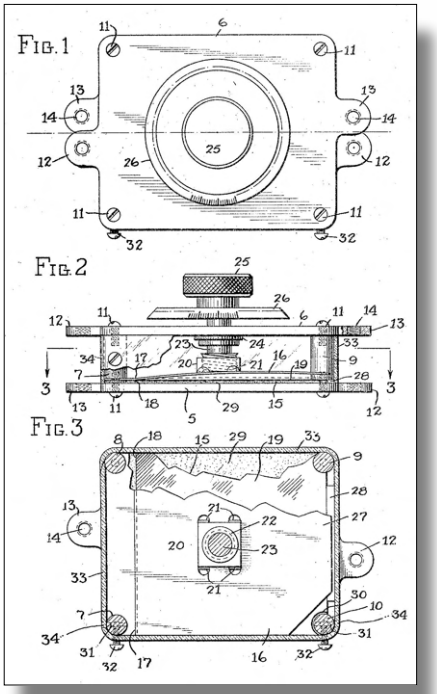
*The bit pieces are shown as attached to and directly carried by the polar projections **7** and **8** of an electromagnet structure which comprises a back or bar carrying at its ends the magnet windings **9**, **10**. The polar projections are made heavy enough to carry a considerable magnetic flux and are closely approached so as to leave a rather small magnetic gap **11** between the ends of the same, as it is the varying force of the magnetism across this gap which produces the vibratory effects transmitted to the bit structure. Usually the approached ends of the pole pieces are faced off squarely and stand in parallel relation so as to present the maximum areas to each other. The bit elements may be secured to the pole pieces in any satisfactory manner, for instance, by means of screws, such as indicated at **12**.*



[1] *also known as "osophone"*

26 - Variable condenser

US patent	1562629
Application date	27 September1923



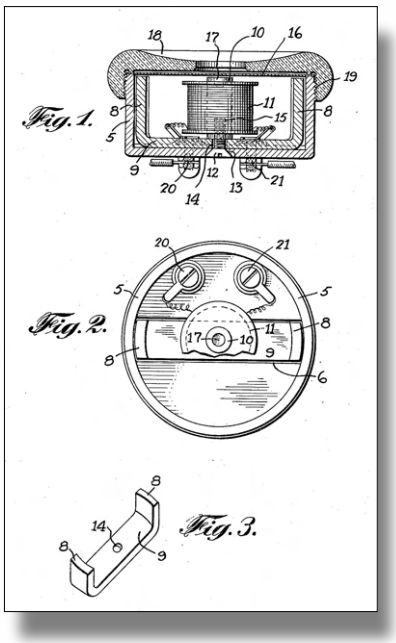
The objects of this invention are to provide a condenser of simple, compact design having high capacity, constant in its operation and adjustable through a wide range of values. …

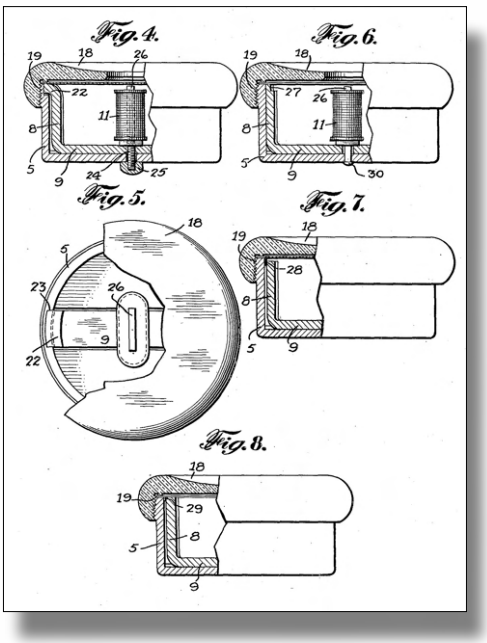
In addition to being small and compact for a high rated capacity, the condenser of this invention can be made particularly neat and attractive in appearance, and produced quite inexpensively. The screw adjusting means enables very fine and accurate adjustments to be made, continuously, throughout a wide range. The total effective movement of the adjustable plate, that is, from substantially zero capacity, up to the maximum, is so small that the same can be effected with one complete turn of the dial, this also being an advantage in giving 360 degrees of continuous adjustment.

27 - Telephone receiver

US patent	1587719
Application date	15 November 1923

This invention relates to the construction of telephone receivers and the objects of the invention are to reduce the magnetic reluctance, prevent loss or dissipation of the magnetic energy, to apply the "pull" or actuating force directly to the center of the diaphragm so as to gain the maximum results and to effect this without distorting or damping the action of the diaphragm.





28 - Ear cushion

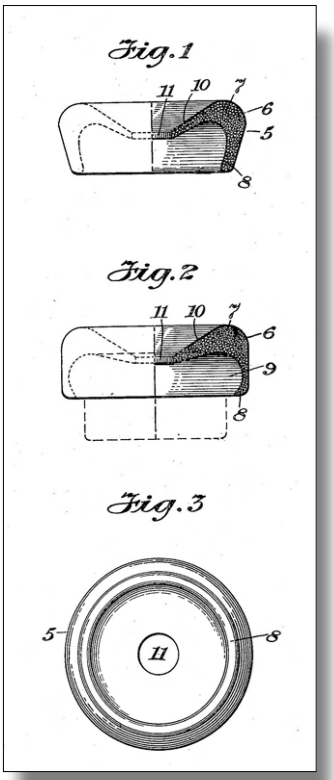
US patent	1514152
Application date	28 December 1923

The objects of this invention are to provide an ear cushion for telephone receivers and the like which can be readily applied to the receiver and will fit closely thereto, without adding materially to the bulk of the same; which will be highly resilient and therefore afford the desired cushioning effect and fit closely to the ear so as to exclude external sounds; and which in addition to the foregoing, will be of small size, light weight and neat appearance. …

*The maximum cushioning effect is provided by making the rim portion of the device quite thick, as indicated at **7** and by forming the same with a rearwardly projecting flange **8** convergent in the shape of a truncated cone. This conical extension or flange is of less than the actual diameter of the ear cap to which the cushion is applied so that in stretching it to pass over the ear cap, such as the one indicated at **9** in Figure 2 2, said flange will act as a succession of levers swinging outwardly, as in Figure 1, forcing the spongy material forwardly into a thicker cushion directly over the rim of the ear cap and at the same time pressing the inwardly tapering front wall part **10** all the more closely into engagement with the cupped face of the ear cap.*

When thus expanded over the receiver cap, the rearwardly tapered flange of the pad becomes substantially cylindrical in external outline and because of the squeezing action described, whereby most of the porous material is forced forwardly, it is thinned out and is therefore of but slightly larger diameter than the ear cap itself.

The features described, in addition to making the pad small and compact and locating the bulk of the cushioning material at the rim where it is needed, also make the pad hug closely and fit snugly to the ear cap, causing it to adapt and fit itself exactly to the contour of the cap. This prevents the formation of air pockets between the cap and cushion and appears to improve the acoustical qualities of the receiver, possibly by absorbing some of the mechanical stresses or vibrations, particularly when the receiver is rigidly held, as when the same is used in a loud speaker.



29 - Cord terminal

US patent	1557248
Application date	28 December 1923

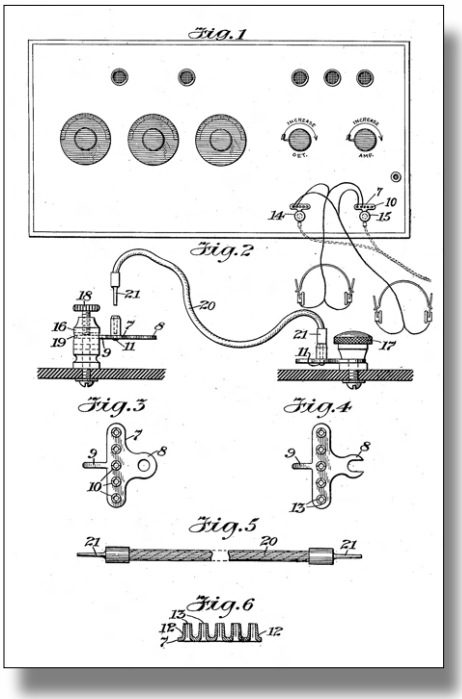
The objects of this: invention are to enable the quick connection and disconnection of a number of different cord circuits with respect to the binding posts or terminals of radio or other electrical apparatus and to effect this with a simple, practical and inexpensive construction.

The invention is particularly useful where it is desired to connect a number of head sets with a radio receiver which is equipped with binding posts for only a simple head set.

*This condition is illustrated in Figure 1 wherein two of the terminals are used, secured by means of their attachment lugs **8** to the two telephone binding posts **14**, **15** of a radio receiving set.*

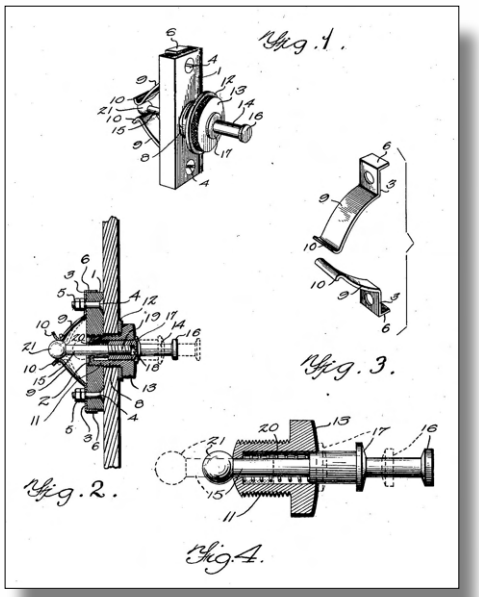
*The device is equally applicable to binding posts of either the true " post " type such as illustrated at **16** in Figure 2 or to the simple clamp screw type such as indicated at **17** in the same figure.*

The invention is widely useful for connecting various forms of radio and other electrical apparatus for experimental or other use. The screw engaging lugs provide a means by which the devices can be quickly secured to the binding posts or terminal screws of condensers, transformers, inductances and the like and such parts may then be quickly connected together in various relations by means of suitable conductors.



30 - Electrical switch

US patent 1585485
Application date 18 September 1924



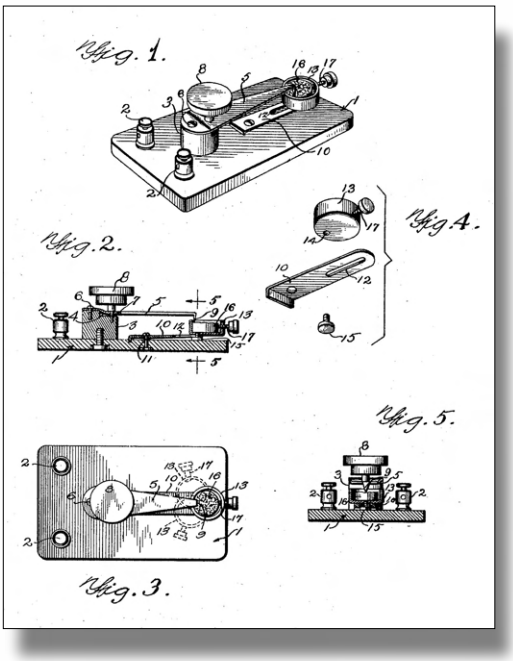
An object of the invention is the provision of a switch having a movable plunger adapted to be retained between a pair of spring contact arms when the switch is in operative position.

A further object is to provide a coil spring surrounding the plunger which is placed under tension when the plunger is projected and which will move the plunger to an inoperative position as soon as the end of the plunger is disengaged from the spring contact arms.

*When the switch is to be turned on the plunger is moved inwardly to the full line position shown in Figure 2 of the drawings. The space between the ends **10** of the spring contact arms is normally less than the diameter of the ball **21** as shown in dotted lines in Figure 2 of the drawings whereby the inward movement of the plunger forces the arms out under tension and causes them to engage the ball **21** and hold the plunger in its inner position. While in this position the coil spring **20** is placed under tension. When the switch is to be turned off the plunger is moved outwardly and as soon as the head **21** becomes disengaged from the ends **10** of the spring contact arms the spring **20** moves the plunger outwardly to its limit as indicated in dotted lines in Figure 2 of the drawings to insure breaking the circuit.*

31 - Crystal detector

US patent 1590236
Application date 18 September 1924



This invention relates to crystal detectors for radio receiving sets, and more particularly to an improved construction of detector by means of which maximum efficiency may be obtained.

In prior construction of crystal detectors, it has been very difficult to obtain a simple device in which the feeler element can cover every point of the crystal.

In the present invention, the crystal cup is eccentrically mounted and is also adjustable longitudinally of the base to permit the feeler element to engage any desired point on the crystal.

An object of the invention is to provide a device having a steel tension spring with a sharpened point that contacts with the crystal and serves as a feeler element or cat's whisker.

A further object is the provision of a construction in which the crystal cup is mounted on a spring platform whereby the tension of the crystal may be regulated as desired by the operator. …

*Pressure is obtained on the feeler element **9** by means of the set screw **7** which may be regulated through the handle **8**. The device may be adjusted around the pin **15** as a pivot by swinging the handle **17** to either side, as indicated in dotted lines in Figure 3 of the drawings. The entire crystal cup may also be adjusted longitudinally of the base by moving the pin **15** in the slot **12**. The support of the crystal cup on the spring **10** provides a construction by means of which the tension on the cup may be regulated as desired by the operator. It will be apparent that the point **9** may be brought into contact with any point on the crystal **16** by making the proper adjustment.*

32 - Process for mounting inductances

US patent	1618002
Application date	10 March 1925

This invention appertains to electrical apparatus and more particularly to the mounting of coils, such as used for inductances and the like in the radio art.

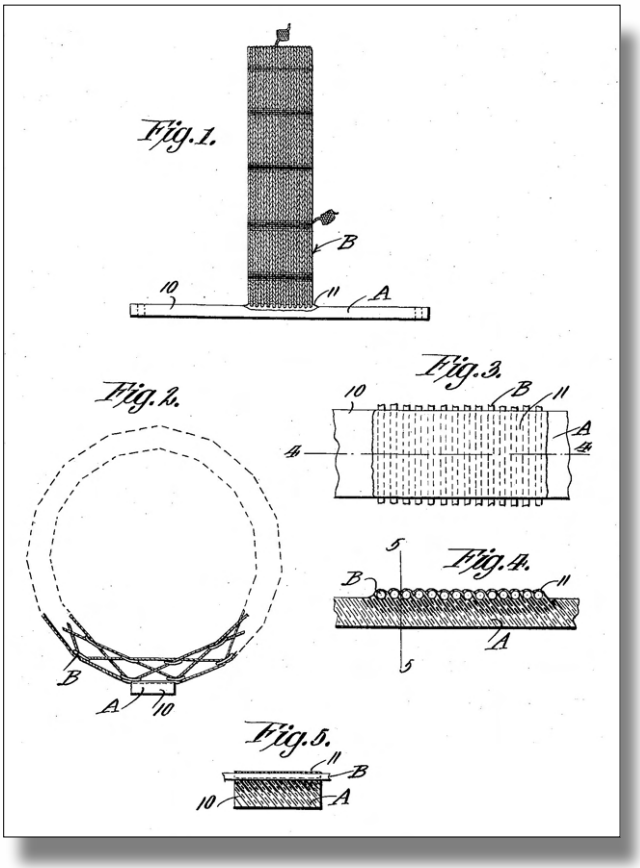
Many experiments have been instituted toward the end of finding an efficient mounting for inductances for radio work. The result of such work up to the present invention has been more or less unsatisfactory. At the present time inductances are usually mounted by some mechanical means. In the case of a basket wound coil, for instance it is possible only to attach the same to condensers or other electrical instruments by running pegs through some of the holes. This gives rise to capacity effect. Furthermore, the mechanical structure of the completed article is poor and the coils invariably work loose.

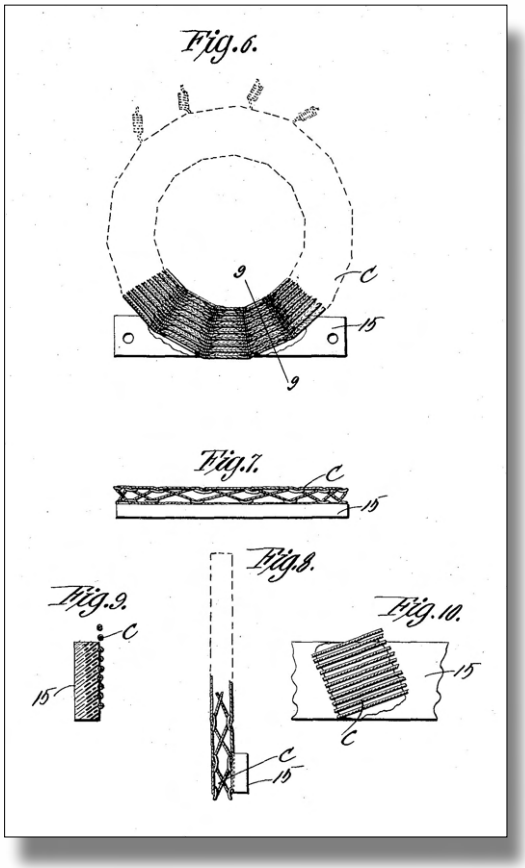
It is therefore a prime object of the present invention to provide a novel means and method for connecting the inductances with a suitable base or mounting, which will be absolutely rigid with practically no mechanical imperfection and without radio frequency losses.

Another object of the invention is to provide a novel means for mounting a coil on a base, which will give a neat appearance and which will be cheaper than mechanical mountings that are now in vogue.

Another object of the invention is the provision of a novel method of incorporating a coil directly in a bar or base plate of celluloid or the like, whereby the coil will form a direct part of the base plate without the necessity of employing extraneous means for connecting the coil to the base plate.

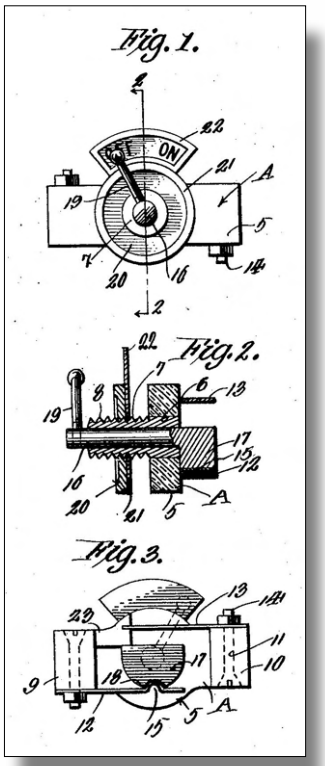
Another object of the invention is the provision of a novel method of mounting an inductance coil which embodies means for softening or dissolving a part of a celluloid or similar base plate and pressing the coil into the softened part of the base plate and allowing the softened part of the celluloid to flow about a portion of the coil which is pressed into the same.





33 - Switch

US patent 1695957
Application date 10 March 1925



This invention appertains to electrical appliances and more particularly to a novel circuit closer of the snap type.

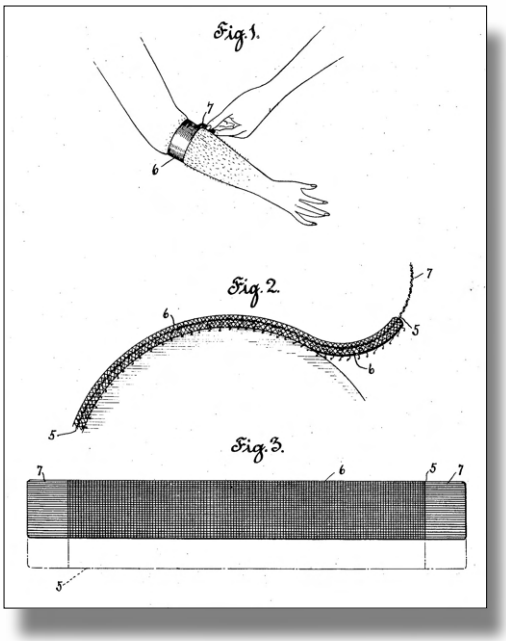
The primary object of the present' invention is to provide a novel switch which embodies a single body of insulation and which is so formed as to form an effective support for the spring contacts and bridge member.

Another object of the invention is the provision of novel means for arranging the spring contacts on the body of insulation and novel means for mounting the bridge member on said body of insulation and for limiting the turning movement in one direction thereby insuring the correct position of the manipulating handle for the bridge member relative to an indicating name plate associated with the said body of insulation.

A still further object of the invention is to provide a switch of the above character which will be of an exceptionally simple and durable construction and which can be manufactured and placed upon the market at an extremely low cost.

34 - Depilator

US patent 1620539
Application date 1 April 1926



The objects of this invention are to provide a simple, inexpensive and effective device for removing superfluous hair, which will be of a safe, sanitary nature, easy to apply and use and entirely practical and desirable for the purposes intended.

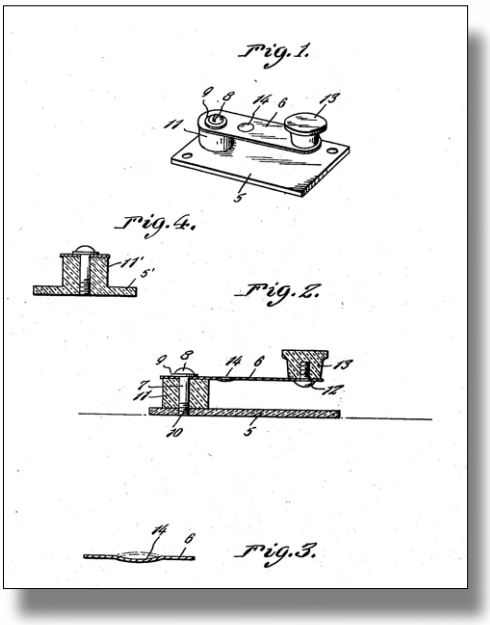
One of the most successful methods of removing superfluous hair heretofore employed has been to apply a layer of waxy material, softened by heat, to the skin and to then strip off this material after the same has hardened sufficiently for the hairs to become fixedly embedded therein. This method at best, however, is rather "messy" because of the need for handling and spreading the sticky soft material, uncertain because of the possibility of using too much or too little of the material or spreading it too thick or too thin and difficult of removal because the hardened layer pares in strips and must be removed fragment by fragment, a rather painful process.

The present invention utilizes the best features of the process mentioned but avoids the numerous objections thereto by a novel structure, combination and arrangement, involving in part the use of a strip or strips of backing material forming a flexible mounting of definite shape and size and the securing to said fabric of a patch of the hair entrapping material projecting sufficiently to enable the hair becoming embedded therein. …

*The material which is used to grip or entrap the hairs is indicated in the form of fairly thick layers **6** interlocked with the fabric and projecting from both faces of the same. This double faced structure is advantageous because of the fact that both sides of the depilator may be used, but if desired, only one projecting layer may be employed and further if found desirable, in some cases a cover strip may be applied over the back of the device to present a clear outside or back surface.*

35 - Code-learner's instrument

US patent	1801734
Application date	16 August 1929



This invention appertains to new and useful improvements in educational appliances and more particularly to a novel device for facilitating the learning of dot and dash codes.

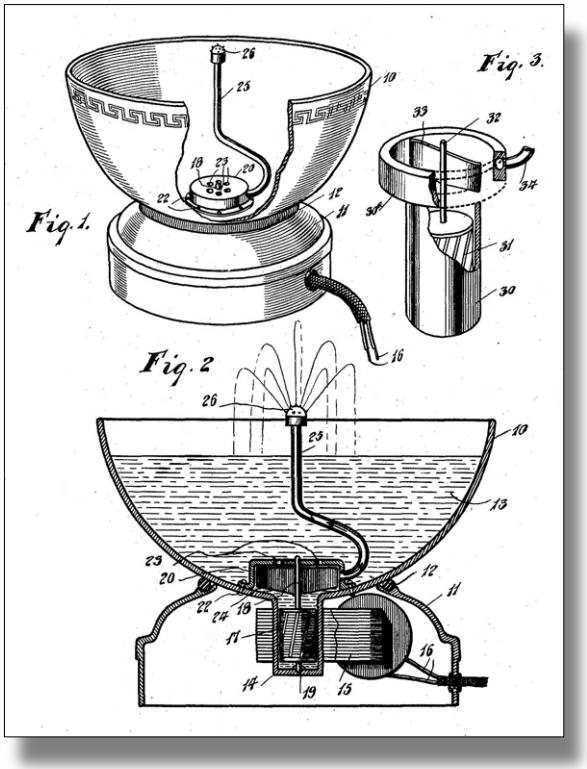
The principal object of the invention is to provide a learner's instrument of the character mentioned which because of its extremely simple construction can be manufactured at a very reasonable cost.

Another important object of the invention is to provide a code learner's instrument which will produce a clear snapping sound when actuated so that a person may clearly detect the intelligence being transmitted, providing two parties are practicing with these instruments.

36 - Electrically operated fountain

US patent	1954704
Application date	19 November 1932
Inventor	KRAUS Joseph H.
Patent owners	(½) KRAUS Joseph H.
	(½) GERNSBACK Hugo, GERNSBACK Sidney, MANHEIMER Irving S.

This invention relates to a fountain and it aims to provide a novel construction which is leakproof and electrically operable and particularly wherein a well of the bowl depends into the stator of the electric motor, the rotor of the motor being disposed in the well to operate a pump and to be cooled by the liquid of the fountain.



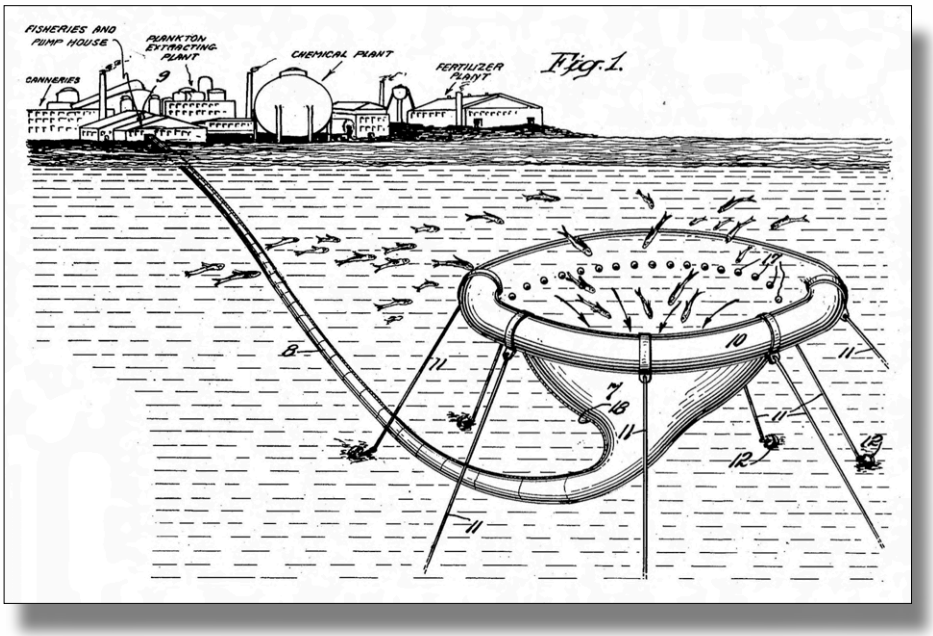
37 - Hydraulic fishery

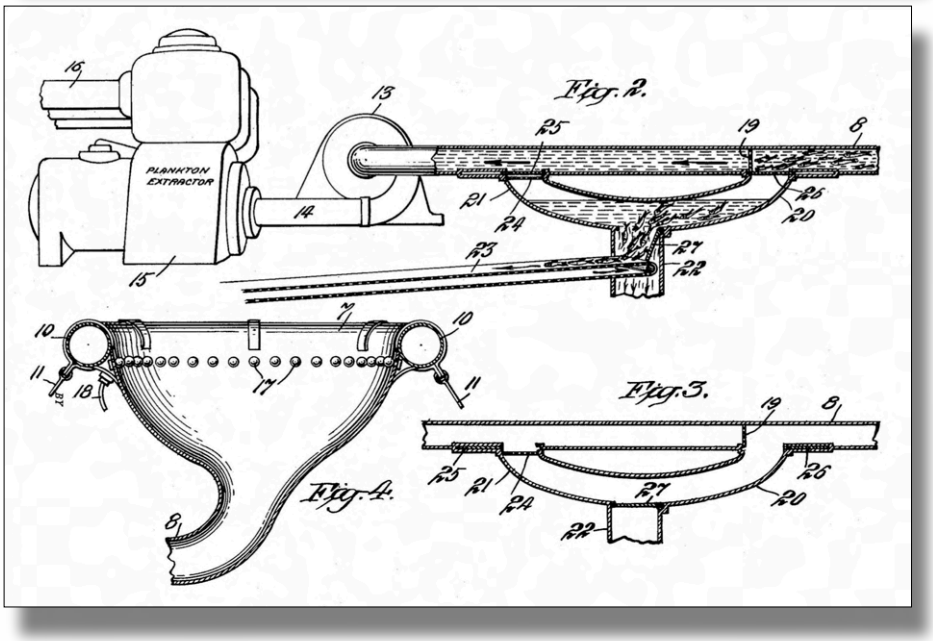
US patent	2718083
Application date	10 July 1953

The invention disclosed in this patent application is a system for catching fish, based on hydraulic principles and utilizing flow of water to entrap and to transport the fish.

Basically the invention involves the provision of a funnel shaped collector submerged in fish-containing waters, possibly miles from shore, and connected by a fish-conveying water pipeline to suction pumps based on shore and operating to create an inflow into the mouth of the funnel and flow of water and entrapped fish through the pipeline to a suitable fish-processing station on shore, and to vegetable and chemical extracting plants for removing other valuable materials from the water.

Objects of the invention are to provide a commercially practical and efficient system of the character outlined which can be installed and operated at low cost and which will not interfere with shipping or other activities in the water from which the extraction is effected.





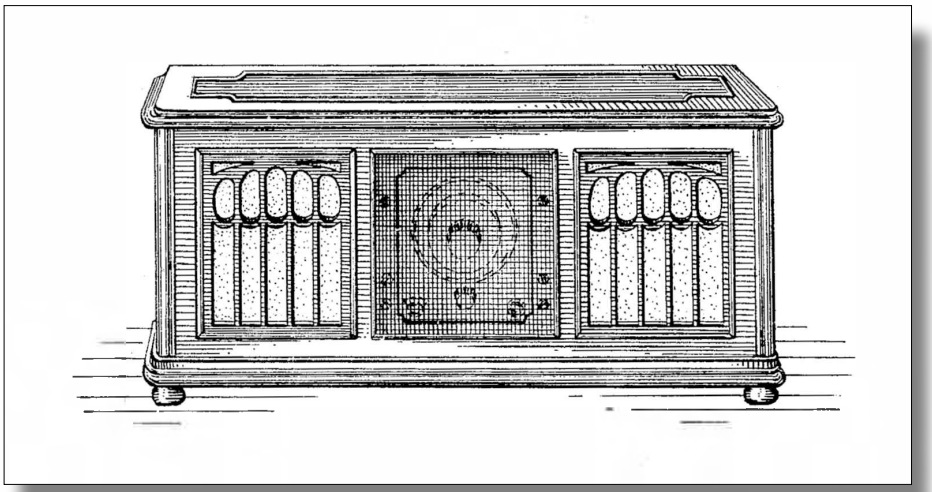
Design Patents (details)

1 - Radiocabinet

US design patent	D67451
Application date	28 March 1925

Be it known that I, Hugo Gernsback, a citizen of the United States, residing at New York city, in the county of New York and State of New York, have invented a new original, and ornamental Design for a Radiocabinet, of which the following is a specification, reference being had to the accompanying drawing, forming part thereof.

The figure is a perspective view of the radio cabinet, showing my new design.



2 - Radiocabinet

US design patent	D67452
Application date	28 March 1925

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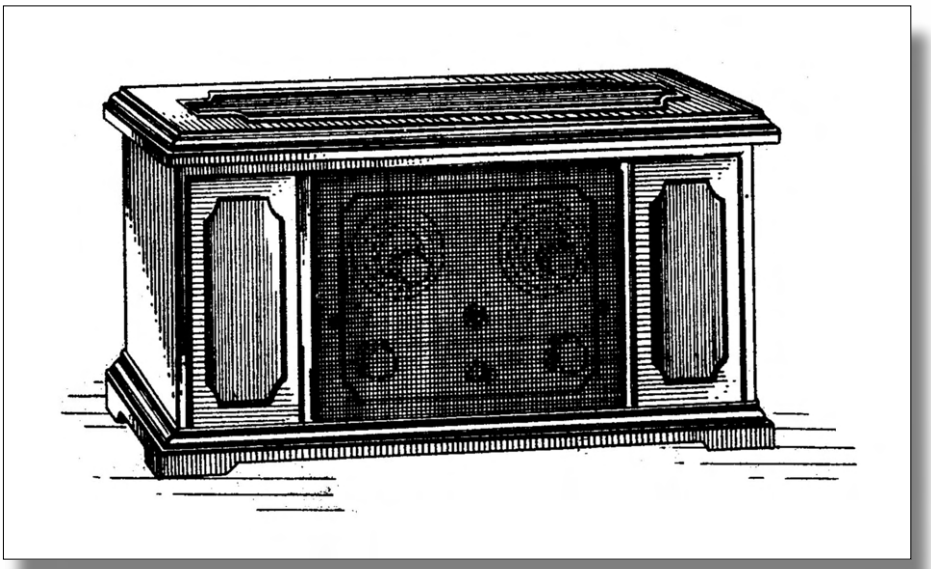

Trademark

US Registration	305558
Date of application	26 April 933
Goods	monthly publication
Owner	GERNSBACK Hugo