

magnetic fields with a fixed armature and a scale, of an index and a looped conductor surrounding said armature and mechanism to counteract said conductor, substantially as specified. 3rd. The combination with permanent magnetic fields with armature of substantially like radial area, of a pivoted conductor surrounding said armature, impelled in said field, and mechanism to return it to its starting point, substantially as specified. 4th. The combination with permanent and similar magnetic fields with armature and a scale, of an index and a looped conductor surrounding said armature and means to counteract said conductor, substantially as specified. 5th. The combination with a permanent positive and negative pole with armature of substantially like radial area as said field, of a resisting couple and deflecting conductor on coincident centres, substantially as specified. 6th. The combination with a magnetic field and armature, scale and mirror of a deflecting coil surrounding said armature, with index to said scale on said coil, substantially as specified. 7th. The combination with a magnetic field having an armature, scales at or near right-angle to each other, of a deflecting coil surrounding said armature, with index for both of said scales, substantially as specified. 8th. The combination with circular permanent and similar magnetic fields and armature therefor and a scale, of a movable looped conductor surrounding said armature, centered in said field, an index to said scale and means to counteract said conductors, substantially as specified. 9th. The combination with a scale, circular, permanent, and similarly magnetic fields and armature therefor with same axial centres, of movable diametrically opposed looped conductors surrounding said armature, on said centre, and index to said scale on said conductor and means to counteract said conductors, substantially as specified. 10th. The combination with a series of scales placed at different angles to each other, circular, permanent, and similarly magnetic fields facing each other and armature therefor with same axial centres, of movable, looped, diametrically opposed conductors surrounding said armature on said centre, an index to said scales on said conductor and means to counteract said conductors, substantially as specified. 12th. The combination with permanent magnetic fields with a fixed armature and movable looped and counteracted conductors surrounding said armature with index thereon, and scale, of a resistance coil in circuit with said parts, substantially as specified. 13th. The combination with permanent similarly magnetic and opposite fields with a fixed armature surrounded by a moving looped counteracted conductor, an index, on said conductor, of a resistance coil and scale, substantially as specified. 14th. The combination with an armature and a pivoted deflecting coil thereon, of a concentrically pivoted index-adjusting support, substantially as specified. 15th. The combination with magnetic field and superimposed armature, of substantially like radial area whereby said armature receives its magnetic flux from its sides instead of its edges, of a pivoted and looped conductor moving on said armature and mechanism to return it to its starting point, substantially as specified.

No. 48,555. Paper Fastener and Suspender.

(*Éillet à papier.*)

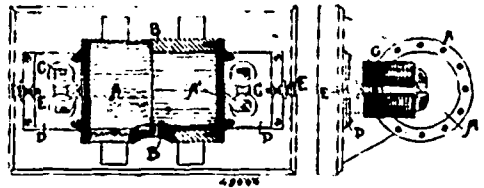


Samuel Henry Crocker, London, England, 1st April, 1895, 6 years.

Claim.—1st. An improved paper fastener or suspender consisting of a strip of thin sheet metal bent or doubled over to form two arms, one of which is provided with a spike projecting towards the other arm and this second arm is provided with a depression, formed by bulging or bending out the metal, into which the point of the spike can enter, substantially as described and for the purposes specified. 2nd. An improved paper fastener or suspender formed from a blank of thin sheet metal, the middle portion of which is reduced in width, bent or doubled over at that portion and formed on one side with a projecting spike, and on the other with a depression into which the spike can enter when applied to the paper, substantially as and for the purposes specified. 3rd. An improved paper fastener or suspender stamped from a metal blank doubled over at the middle, and formed with a depression on one side and a spike stamped from the other a short distance from the extremity, substantially as described and shown. 4th. In an improved paper fastener or suspender of the kind heretofore described, having a depression in one arm, the spike B', formed at the extremity of the other arm as shown in the drawings. 5th. An improved paper fastener and suspender formed from a metal blank by cutting and bending over the middle portion of one end upon the other forming a loop for purposes of suspension, and two arms for holding the paper, one with a small spike projecting towards the other arm, and the other with a recess to receive the spike, substantially as described and shown.

No. 48,556. Synchronism Indicator.

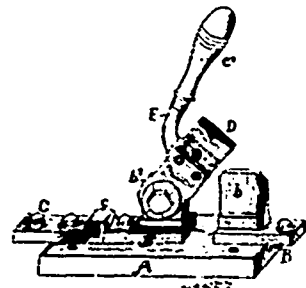
(*Indicateur synchronisme.*)



The Canadian General Electric Company, Toronto, Ontario, Canada, assignee of Louis Bell, Chicago, Illinois, U.S.A., 1st April, 1895; 6 years.

Claim.—1st. The method of indicating synchronism or lack of synchronism between two or more machines of the alternating current type, which consists in setting up sound waves corresponding in periodicity with the current waves of the respective machines, which sound waves are free to interfere with one another and give rise to beats if of unequal periodicity so that the resulting sound beats indicate inequality in speed of the machines, as set forth. 2nd. The method of indicating synchronism or lack of synchronism between two or more electric machines of the alternating current type, which consists in setting up by the magnetic effects of the currents of such machines distinctive series of sound waves corresponding respectively in periodicity with the current waves of such different machines, which sound waves by their interference, if unequal in period, give rise to beats, and thereby indicate audibly the presence or absence of synchronism, as described. 3rd. An indicator for indicating synchronism between two or more alternating current electric machines consisting of diaphragms or vibrators in an acoustic medium, and means whereby each machine imparts to a corresponding diaphragm or vibrator, vibrations corresponding in periodicity to the current waves of such machines, for the purpose described. 4th. An indicator for indicating synchronism or lack of synchronism between two or more alternating current machines which consists of separate magnets responding respectively to the current waves of the different machines, and a magnetic diaphragm in intimate magnetic relation to each such magnet, whereby equality or inequality in the periods of the sound waves caused by the diaphragms may be detected by the ear to indicate synchronism of the machines. 5th. An indicator for indicating synchronism between two or more alternating current machines consisting of magnetic diaphragm placed opposite one another in a more or less confined sounding chamber, a magnet in intimate magnetic relation to each diaphragm, and circuit connections from the different machines whereby the magnet impulses in the magnets respond accurately to the current waves of the respective machines. 6th. The combination in an indicator for the purpose described, of transformers the primaries of which respectively are in circuit with the machines, and magnets connected respectively in the secondary circuits thereof, with means for indicating audibly synchronism of the machines, comprising vibrators whose vibrations are caused by and keep time with the magnetic impulses produced in said magnets by reason of their connections with the machines.

No. 48,557. Electric Switch. (*Aiguille électrique.*)



The Canadian General Electric Company, Toronto, Ontario, Canada, assignee of Albert B. Herrick, Schenectady, New York, U.S.A., 1st April, 1895; 6 years.

Claim.—1st. A switch comprising an insulated base, a pair of terminal metal plates fastened thereto and formed with integral contact lugs projecting from them, the opposite sides of said lugs being finished in parallel planes in line with one another, a pair of flat elastic metal blades arranged to embrace the respective lugs between them flatwise to close the switch, and a block interposed between said blades, fastened to them, and by which they are moved. 2nd. A switch comprising an insulated base, a pair of terminal metal plates fastened thereto and formed with integral contact lugs projecting from them, the opposite sides of said lugs being finished in parallel planes in line with one another, a pair of flat elastic metal blades arranged to embrace the respective lugs between them flatwise