

Elmer Gates
1904 Synopsis of Inventions

Acoustics and music: an electromagnetic method of producing fundamental tones without their harmonics, and by which the number and harmonic relation of overtones can be regulated in a note, so that tonal qualities can be made sad or gay; musical instruments and acoustical apparatus; acoustically regulated automatic devices; synthetic music, counterpoint of overtones; methods of training.

Aerodynamics: device for dynamometrically measuring effectiveness of aerial propellers; an aerial propeller; a method of aerial propulsion.

Alloys: method of making and testing.

Architecture: construction of sanitary and sanatory houses, building materials, segmental houses.

Chemistry: monochromatic chemistry, cellular synthetic chemistry; qualitative analysis.

Electricity: measuring instruments; sunshine into electricity; gas storage battery; Foucault-current telephone dynamo; electric typewriter; vacuum enclosed dynamo, motor, and static machine.

Fire protective devices: fire extinguisher, a new method (the basic fire-foam patent)

Food improvement: selective propagation and cell stimulation and method of analyzing minute qualities to augment any desirable constituent and eliminate undesirable ones; radiothermic cooking.

Gems: artificially making all oxide gems; enameling; fluoroscopic separation of gems from gravels.

Grinding, pulverizing: cryothermic method.

Higher temperatures: a method of obtaining; non-contaminative heating, metal working and shaping.

Invisible optics.

Lighting: hygienic illumination by shielding from eyes, screening out invisible rays.

Linguistics: word groups for special trades, professions.

Looms and mining

Metallurgy: reduction of titaniferous ores; higher temperatures applied to reduction; agglomerating ores.

Meteorology, electric: experiments and devices showing relation of electricity to weather.

Microscopy and telescoping: the double microscope; reflection microscope; cumulative photomicrography; invisible-ray photomicrography; oxygen lens.

Non-electrolytic device: plumbing, vessels and pipes.

Painting and pictorial representation: comparative visibility of pigments in relation to distance and color perspective; augmentation of luminosity by reflected colors.

Pedagogics: improved and new educative apparatus; psychurgic instruments; psychotaxic museum groups; educative toys; prismatic photometer; electric sonometer; reflection color wheel.

Photography: sensitive plates in relation to temperature of greatest sensitivity; photographic values of pigments under different reflected visible and invisible colors.

Physical training: psychophysically regulated training devices; sports and games for special and general training; mechano-therapy.

Publication: devices for printing any number of copies simultaneously; terromagnetic transmission of news.

Radiothermics: focalization of solar and other rays and their applications to non-contaminative fusions, recrystallizations in vacuo, and enameling.

Refrigeration: thermostatic regulation of rate; automatic cooling of air in houses, regulation of moisture; non-conductive vacuum plates.

Submarine: devices for industrial operations and exploration.

Toys: dumbbell wrestlers, bow-gun top; bat and return ball; cryophorus toy; kaleidoscope marble; cushion hobbyhorse; top and stick; paper and spool shoot-the-chute; parallel-line illusion on transparent paper.

Various devices: linear-lens ruler; suction sweeper; anatomical transparencies; clay furniture; electrosonic drilling and graving; airjet motor; Axminster static machine; method of delinting cottonseed; bathing bag for army or camp; suction bath sponge; hollow-wick candle; draw-cut scissors; vacuum clock; water lens; collapsible and hollow-handle toothpaste brush; *multum in parvo* computer; hourglass self-closing ink bottle.

War: armor plate, of greater resistance, that will float; rapid-fire gun; others.

X-Rays: electromagnetic augmentation; plateholder.