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PUBLISHED WEEKLY AT NO. 37 PARK ROW, NEW YORK.

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NEW YORK, SATURDAY, MARCH 5, 1881. ----

150 147

155

150

 $154 \\ 148$

PAGE

Contents.

(Illustrated articles a	are m	arked with an asterisk.)
Agricultural inventions	149	Lunar volcanoes
Amateur mechanics*	150	Man, descent of
Ants, white, in court	145	Matches
Apple trees, to protect (1)	154	Mechanical inventions
Aqua ammonia, how made (27)	155	Oil-stone, to mend (6)
Barometer. to retill (13)	154	Osprey, the*
Battery. ducking, how to make*.	153	Osprey, the* Mechanics, amateur*
Bird skins, to preserve (24)	155	Motive power and machinery
Black polish for leather (28)	155	Paint, to remove (32)
Boat, tire mammoth*	143 .	Paper from salt hav
Boiler explosion, steam		Patent decisions
Bottles, drop attachment for*	146	Pearls, artificial, how made
Breadmaking in the East		Pennsylvania, geol survey of
Burned papers. to restore (14)	154	Perfume. West End (3)
Cattle car competition		Photophone, a simple
Codfish, salted, reddening of	151	Pinking machine*
Coke, effect of on vegetation (7).	154	Railway car, scientific
Colored tires (23). Designs, frost, on printed stuff.	155	Railway prizes
Designs, frost, on printed stuff.	148	Reissue decision, important
Electrical exhibition at Paris	148	Sacrifice. a, in a study
Engines. steam. for elec. lights	145	Saltpeter, to recover (10)
Evening sky the	152	Sandford, Dr., thelate
Exhibition, electrical. at Paris	148	Sawdust, new use for
Explosion, boiler, steam	148	Scientific society, oldest
Fertilizer, improved.	151	Sewing machine factory
Fire boat, mammoth*.	145	Silks, American and French
Fog horn. improved*		Silver, to oxidize (11)
Fungi astonishing, in Nevada	149	Skate sailing*
Glanders, contagiousness of	152	Snow, the density of
Glass, to color black (19)		Soapstone, what becomes of the.
Gold drawing on japan (12)		Sugar, corn stalk
Gunpowder, experiments in		Telegraph wires in cities
Hatcheling device, new *	141	Telephone reissue, a
Induction coil (17).	154	Training, physical
Inventions, agricultural	149	Vinegar, aromatic (4)
Inventions, mechanical	140	Volcanoes. lunar.
Inventions, miscellaneous		Wasp, a, attacks a spider
Inventions, new		Watch, self-winding*
Inventions, recent	123	Woodworking
Lead plates, to join (2)	194 /	

TABLE OF CONTENTS OF THE SCIENTIFIC AMERICAN SUPPLEMENT

No. 270,

For the Week ending March 5, 1881.

Price 10 cents. For sale by all newsdealers.

Richelleu at Toulon.-Burning of the Involution Richelleu Towing and Discharging Torpedoes from Torpedo Boats. 4 4297 Trials of the Inflexible Guna Test of Armor Plate Water Engine. 1 figure. Wigzell and Pollit's water engine... Structures in the Sea Elevated Cable Railways. Extinguishing Fires in Coal Mines. Blasting. By ARTHUR KIRK.—The hole and how to make it.— he explosive used.—The manner of firing the charge. Peruvol Coal AND CHEW(STRY.—Urrogallal for Dry Plate 429 429 4298 4299 4299

TELEGRAPH WIRES IN CITIES.

communication in and around this city recently, exposed ordinary railway car"—that is to say, any form of tank many defects in the usual method of supporting telegraph car. and telephone wires. The rapid restoration of the lines to working efficiency has strikingly exhibited the inherent con- among other defenses, that the reissued patent was too venience and value of aerial lines.

How to secure immunity from such interruptions in the future, without laying too great a burden upon the owners to dispose of the case upon a more radical and comprehenof wires, and without restricting the easy extension of elec- sive objection. After citing the unimpeached and uncontric communication, is a problem of no small importance.

property interest in telegraph or telephone lines, was that carded for reasons given, and that the use of return casks 1 60 the practice of setting up wires on poles and houses should placed and fastened as described in the patent had been be stopped, and that all electric wires should be put under practiced for twenty years or more, the court said: ground.

New York State Legislature to secure such a placing of this testimony and of any testimony, upon looking this rewires within city limits before July 1, 1882. The bill pro- issue in the face and examining its several claims by their vided that after the date given it should not be lawful to use own light, we find nothing that brings any of them within any wire above ground for telegraphic, telephone, or elec- the sphere of what is patentable. There is no novelty and tric lighting purposes, except indoors. In framing this bill no utility." On this ground the Supreme Court pronounced its author neglected to take account of the conditions under the entirety and all the particulars of the claims "frivolous which private lines of electric communication are set up and 'and nothing more." operated.

part of the wires-which is far from evident-the require- and sanctions which attend all other property. Patentees as ment that all wires shall be so placed would be little less than prohibitory in the case of private wires, since the cost protected; but the public has rights also. The rights of of the work would outweigh any possible benefit. Besides, the frequent upturning of the streets for the extension of whenever they come under judicial consideration." such lines, were it otherwise practicable to bury them, would be a nuisance quite unbearable.

The exigencies of modern business and social life require not only the widest extension and the cheapest maintenance of electric service attainable, but also its readiest extensibility. This, not by great corporations solely, but by individuals. It is a common thing nowadays for business houses to supplement the facilities offered by the telegraph com- PHYSICAL TRAINING AS A MEANS OF MENTAL HEALTH. panies and telephonic exchanges by maintaining from one to a dozen or more private lines. The public will not willingly assent to any curtailment of such facilities.

The relatively low cost of aerial lines, and the ease with which they can be set up and repaired, make them in many instances of this nature the only available means of electric communication. As for lines which might go underground the question would arise, Which is the greater nuisance, the poles for the support of aerial lines, cabled or separate, or the difficult problem of determining whether the subways be owned by the city, or whether some company or combination should be allowed to acquire a monopoly of the meaus of electric communication within the city limits.

aerial lines. While the sinking of through lines should be encouraged, if it can be done without introducing greater will, by contrast with their more active life, look back upon evils than the change is intended to cure, the first effort our age as measurably screne. It is remotely possible that a should be to improve the modes of supporting and distribut- new order of invention may reverse the tendency of the ing the existing lines. The difficulty with these lines, as race and relieve the future of much of the mental and nerthey are, arises chiefly from the insecurity of their supports, the lack of concert of action in their erection, and the ab- that way now. The immediate future, at anyrate, is pretty sence of any orderly supervision of their distribution.

necessitating any sweeping change in the systems, or endan- whereby the rising generation can be fitted to endure the gering in any way the freedom and economy of electric service.

There is ample room on the roofs of houses for such an requirements and avoid at the same time the unsightly tan-¹ continued schooling gives, would furnish the capacity for gle of wires now prevailing. There is no great objection to mental work and mental endurance which would best fit the the supporting of wires on houses if the supports are properly placed and sufficiently strong. Hitherto individual permission so to place wires has had to be obtained. The the speed of doing it, without materially increasing man's essential value and necessity of electric service would seem capacity for toil. In many instances the course of education to justify the granting of the right of way over houses for pursued seems rather to have lessened the endurance of our ages to be assessed and met in the usual way. Under such our brain workers. legal privileges, restraints, and regulations, most of the con- And the school children of to-day have more to do than

the method of attaching them to the car, but "their equiva-The ice storm which so seriously interfered with electric lent when constructed and operated in combination with an

> Suit being brought for infringement, the answer set up, broad and was therefore void.

The court saw fit to disregard this plea, deeming it proper tradicted testimony of witnesses called by the appellees, to The first demand, particularly from those who had no the effect that the complainants' wooden tanks had been dis-

"This testimony leaves nothing of the substance of the In response to this demand a bill was introduced in the plaintiffs' alleged invention. . . . But, irrespective of

"Patents rightfully issued," the court observed further Granting the feasibility of putting underground a large on, "are property, and are surrounded by the same rights a class are public benefactors, and their rights should be both should be upheld and enforced by an equally firm hand,

A few more decisions of this tenor should put an end to the practice which has wrought so much injustice to the public and brought so much discredit to the patent system, we mean the extension of obscure and often trivial patents so as to make them cover, on reissue, valuable processes or products not within the scope of the original.

One of the serious problems which modern science encounters is how to deal with-more particularly, how to prevent-the excessive nervous development, and through that the frequent mental failure or derangement characteristic of modern life. The mad poet's sarcastic remark, that brains had brought him to the asylum--a fate his interrogator ran no risk of-was bitterly true; but it is not volume of brain so much as an unbalanced development of brain that leads to insanity or aliability to that distressing malady. the frequent tearing up of the pavements for extension, alter- | That the rapid, eager, restless, anxious life which the most ations, and repairs, if the lines are buried? Then would come of us lead tends to produce an increasing complexity of the the difficult problem of determining whether the subways nervous system, all physiologists agree. That this complexfor telegraphic, telephonic, and electric lighting wires should ity of nervous organization lays us liable to the development of a condition of unstable mental and nervous equilibrium is only too clearly proved by the statistics of our asylums.

What are we to do? We cannot radically change our Plainly the time has not come for an abandonment of style of living to that of our slow-going ancestors; on the contrary, the indications are that our children's children vous strain which we have to endure; but it does not look sure to intensify the conditions which so many break down It may be that legislation will be required to remedy these under to-day. Must the mental breaking down increase in evils, but that should be had without difficulty, and without 'frequency in proportion? Or can we pitch upon some means strain which will come to them, better than the men and women of to-day bear the burden of to-day?

A generation ago the popular theory was that mental disorderly distribution of aerial wires as would meet the public cipline, with the brain development which early and longcoming man for the work he would have to do.

The result has been to increase the work to be done, and people, and to have hastened the mental collapse of many of

4306 fusion, misplacing, imperfect supporting, and other faults their fathers and mothers had, and have to bear no inconsid of aerial lines, could be corrected and the way left clear at erable portion of the evils of modern life besides; that is, if the same time to extend our systems of electric communi- constant excitement, haste, and worry are to be accounted obstacles to healthy mental and nervous development. That they cannot fairly be considered beneficial is sufficiently evident.

The Detection of Starch and Dextrine. By SPENCER UMFRE-	
VILLE PICKERING How to Soften Hard Water	4306
How to Soften Hard Water	4306
HOL ICELondon Chemical Society Daper by Dr. UARNELLEY,	
and discussion Eaponification of Fats. By Dr. VANDER BECKE	430(
Enervescent Beverages -Formulæ for making ginger beer	4301
Lemon beerHop beerSpruce beer	4308
Campbor Production	4308
Camphor Production. Sugar Making in Cuba. Raising caneExtracting the juice-	1000
Boiling processes.—Best soil for sugars.—Prices of freighting.—	
Manner of stowage	4309
III. ELECTRICITY, LIGHT, ETC The Electrical Photometer, 2	
figures. The Photophone. 4 figures. The British Government and the Telephone	4302
The Photophone. 4 figures.	4302
The British Government and the Telephone	4303
The American Rapid Telegraph in England, 2 figures	4304
Sound from Radiant Energy	4304
IV. EYG(ENE AND MEDICINEFatal Dose of Carbon Oxide for	
Various Animals. By M. GREHART. Cause of Diphtheria in the Family of Samuel Crump, Esq., Mont-	4307
Cause of Diphtheria in the Family of Samuel Crump, Esq., Mont-	
clair, N. J. By Dr. J. W. PINCKHAM	4308
Natural Bone Setting	4000
V. METEORQLOGY, ETCMaritime Meteorology. By THOMPSON	
B. MAURY. WindsHurricanes or cyclonesHins for heading	
ships in or near cyclonesResearches in ocean meteorology	4304
The Hurricane at Sitka Heat Conduction in Highly Rarefied Air. By WM. CROOKES	4000
	3001
VI. ART, ARCHITECTURE. ETCCount Ferdinand de Lesseps and	1005
bis Family. Full page illustration. 5 portraits Artists' Homes. No 10. Yattendon, Mr. Alfred Waterhouse's Residence, Full page illustration. Perspective and plans	4290
Residence. Full page illustration. Perspective and plans	4300
Artists' Homes No 10	4301
Artists' flomes. No. 10	1001
CLARKE	4301
VII. MISCELLANEOUSThe Sacerdotal Palaces of Mictian, in	
Mexico. 2 figures. Ruins of MictianHall of the Six Columns.	
-Ladies of Tehnantepec in Ball Costume.	4309
Solling Stock	4310
The flay Crop	4310
Put Cloren in Your Land	4310

cation unlimitedly.

ANOTHER IMPORTANT REISSUE DECISION BY THE SUPREME COURT.

The tendency of recent decisions of the Supreme Court of in the decision delivered by Mr. Justice Swain in the case of becomes more and more highly organized, convolutions ob-Densmore et al. vs. Scofield et al. (December 20, 1880), ap- tain secondary gyri, and with each differentiation in structure, District of Ohio.

method of attaching to ordinary flat cars over the trucks two mode of life with which the nervous system must keep large wooden tanks for holding petroleum while in transit pace."

on failways, so as to carry the oil in bulk instead of in bar- If there were no possible corrective to this tendency to rels or other commercial vessels. Subsequently, after the well-increase the nervous strain of life more rapidly than the nerknown iron tank car had come into general use, the patent vous organism can acquire power to endure it, the inevwas reissued. The specifications of the reissued patent were itable destiny of civilized men would be the madhouse or so drawn as to cover not merely the original two tanks and something near it. But there is promise of such a correc-

Speaking of the nervous excitements and their results, due to our modern education and the rate and manner of our the United States, with regard to reissued patents, lately living, an eminent English physician (Dr. Browne, editor commented upon in this paper, received another illustration of the British Medical Journal) says: "The cerebral tissue pealed from the United States Circuit Court for the Northern new possibilities of disturbances are introduced; while the very differentiation in question produces in turn new me-

It would appear that the complainants had patented a chanical devices, which again introduce a more complicated