RECENT DECISIONS RELATING TO PATENTS.

United States Circuit Court,-District of Minnesota.

PATENT FOR CORRUGATED IRON FOR BUILDINGS .- BELT vs. CRITTENDEN.

granted to F. E. Perkins, May 30, 1876, for improvement mospheric realm and governs the movements of the rain in metal coverings for buildings,

The claim is:

A metallic covering for wooden structures, composed of neto-electric forces as prime attributes of matter. the metal sheets, B, applied to the surface of the structure in the manner shown, whereby an air space is left between explosives into the cloud realm, and compressed air and England was also above the level of the ocean. The thickcept at the edges of the sheets, substantially as and for the through its appropriate medium of metallic wire, textile purpose set forth.

Nelson, J.:

The defendant's witnesses, upon the defense of novelty. refer to several forms of corrugated iron previously used, and all would fill the specification and claim made by the complainant. The fact that the iron at the point of contact, tailed by the obstruction offered by the grass or grain pre- the coal measures, and have remained emerged ever since, with the wood is double in thickness, or that the nail holes viously cut and lying in the previous swath, since it tends The slight southward dip indicates that during the Devonian at the joints may be made elongated in order not to interfere to clog the cutter, and thus renders its operation difficult or age a general and gradual rise of the continent took place with the nails in case of expansion or contraction lengthwise imperfect, or arrests it altogether. By moving the grass or from the north, which raised successively above water parts of the corrugations, will not sustain the patent; nor will his grain thus cut away from the standing grass or grain the of the lower and upper silurian in the Helderberg and manner of forming the joints connecting the several sections 'machine has a clear track, so that the cutter bar can operate Oriskany sandstone, which were laid dry when the Catskill of sheathing aid him. There is no novelty in the latter.

The bill is dismissed, with costs.

United States Circuit Court.-Northern District of New York,

PATENT WAY RAKE .- WISNER VS. GRANT et el. Wallace, J.:

1. Claims 1, 2, and 4 of reissued letters patent granted to William H. Field, November 5, 1878, for an improvement in horse hay rakes, held to be substantially anticipated by the patent granted H. W. Sabin, December 3, 1850.

2. Where the office of a reissue was to secure a broad claim the complainant in a suit upon such claim must be held thereto, even though the real invention is not secured thereby.

United States Circuit Court.-Southern District of New York.

MCDONALD vs. SIDENBERG et al.

Donald vs. Shepherd to the patent granted to Helen M. Mc. protectors, approved.

Helen M. McDonald for herself. Mr. E. N. Dickerson for the defendants.

Blatchford, J.:

The defendant's article in the present case does not have a fluted or plaited border, but it is like the plaintiff's article also be strong and durable, has been patented by Mr. John its reflex action northeastward, the swelling of the plateaus in all other respects. I concur with Judge Lowell in not regarding the fluted or plaited border as essential, in view of the state of the art prior to the plaintiff's invention in December, 1861. The affidavits presented by the defendant in the present case do not show any article anticipating that date like the plaintiff's invention, whether with or without a fluted or plaited border. T. D. Day gives no date earlier, the Historical Society of the township, under the immediate than 1865. The article of 1858, which J. Morrison speaks of, was only a facing. His entire affidavit is too vague and ured sixty-four by thirty-five feet at the summit, gradually hard subcarboniferous conglomerate, which must have been general. H. Douglass, as to a skirt protector of enameled cloth over a facing, gives, as a date, "as early as 1861." This is not sufficient. R. Hood goes back only to 1865.

An injunction is granted.

----New Method of Precipitating Rain Falis.

gles, of Fredericksburg, Va., for what he designates as a new and useful mode of producing rain or precipitating rain falls from rain clouds, for the purpose of sustaining other skeletons were found in the mound, the smallest of vegetation and for protection against drought and for sanitary purposes

realms, said balloons carrying torpedoes and cartridges an engraved stone tablet (now in Cincinnati), from the charcharged with explosives, and there to explode or detonate acters on which Dr. Everhart and Mr. Bowers are led to them by electric force.

"My design," he says, "is to employ every kind of explosive force at an elevation in the cloud region of the atmosphere, in order to condense rain clouds by concussive

to check its fall in overabundance in a given locality by causing the rain clouds to discharge rain before the given locality has been reached by such clouds.

The complainant is the assignee of the letters patent science, and that electrical force sways and controls the atclouds, bursting into thunderstorms, dispensing rain and

> "I propose to employ the magneto-electric engine to send fiber, cordage, and elastic tubes."

AGRICULTURAL INVENTIONS.

In cutting grass or grain, more especially if it be heavy, much trouble, annoyance, labor, delay, and expense are en- heaved above the level of the ocean before the deposit of with freedom and without danger of becoming clogged. sandstones and shales were still depositing. The most not-Mr. William Prindle, of Santa Clara, Cal., has patented a notable upheaval of the Catskill region probably took track clearer adapted to perform this function; and it is place at the time of the great revolution which embodied in a certain construction and combination of raised the main Appalachian system; doubled the size tubes, rods, and other parts, forming an adjustable skeleton of the early continent, and closed the carboniferous frame

of Quitman, Mo., have patented a combined harrow, marker, and cultivator, so constructed as to harrow the ground and at the same time mark it for planting, and also to cultivate the western plateaus. When this great Appalachian upout of order.

Mr. Edward M. Hand, of Fredericksburg, Iowa. has patented a device for collecting manure from various points Green Mountain ranges on the east, which, though affected and conveying it to a compost heap or a wagon or other place of deposit. It consists in a novel rake and the com- action of the upheaving force from those quarters on the bination therewith of two hinged curved arms connected to region beyond. a draught bar, and two pivoted straight arms serving as handles, whereby provision is made for adjusting the rake was free to display its full power; and to this cause Pro-The construction given by the court in the case of Mc- to different positions and for tilting it to discharge the load. Donald, September 29, 1874, for an improvement in skirt, Thomas J. Tally, of Rockport, Texas. This plow is de-bend westward of the whole system, in Pennsylvania, as signed for plowing land, preparing the land to receive the well as the significant fact that it is in the prolongation of seed, and cultivating the plants. It is convenient, effective, the axis of that convexity that the western plateaus beyond and not liable to get out of order.

A fence that will effectually prevent cattle, fowls, dogs, etc., from passing into the field it surrounds, and which will Vance, of Forest, Ontario, Canada.

----Ancient American Giants.

The Rev. Stephen Bowers notes, in the Kansas City Review of Science, the opening of an interesting mound in Brush Creek Township, Ohio. The mound was opened by supervision of Dr. J. F. Everhart, of Zanesville. It meas- other hand, it might be supposed that the covering of the 'sloping in every direction, and was eight feet in height. There was found in it a sort of clay coffin including the the Catskill formation against denudation, prevented their skeleton of a woman measuring eight feet in length. Within being swept away, as in the surrounding region, and thus this coffin was found also the skeleton of a child about three and a half feet in length, and an image that crumbled when But the known facts hardly warrant more than a surmise. exposed to the atmosphere. In another grave was found The Hudson River valley during the Champlain Epoch the skeleton of a man and woman, the former measuring of the Quaternary age was an arm of the sea. . The last end Among the recent patents is one taken out by Daniel Rug. nine and the latter eight feet in length. In a third grave of the Catskills was then a series of high marine bluffs, occurred two other skeletons, male and female, measuring worn out by theaction of the waves, and this would explain respectively nine feet four inches and eight feet. Seven the abruptness of their eastern termination. which measured eight feet, while others reached the enor-

Spiral Energy.

force or the power of explosion within such region, thereby Shettle read a paper "On the Influence of Solar Radiation on in length. They were all sizes, and not one being seen in a precipitating rain to sustain vegetation, prevent drought, the Earth's Rotation." The fact established by Dr. Shettle, natural position. The water was literally covered with them. and also purify and renovate the atmosphere during periods that the magnetic energy of a bar magnet acts along spiral During the passage among the turtles, Spanish mackerel lines, has led him to surmise that the energy emanating from were leaping high in the air in every direction, as if de-"I contemplate the employment of nitro-glycerine, dyna- the sun and impinging on the earth on the zone of the eclip- termined to escape from the sea, giving evidence that either mite, chlorates of nitrogen, gun cotton, gunpowder, fulmi- tic traverses the earth in a spiral path, and finally emerges the water underneath was in a dreadful commotion or the nates, and other explosives, and to use the magneto-electric at the magnetic poles. The spiral of energy is "right- sea monsters had come down on them from some strange telegraph on the surface of the ground and the phono-tele- handed" at one pole and "left-handed" at the other, like sea. graph in the cloud realm to direct action in cases where a the magnetic force in a magnet, and the electric discharge in plain these odd phenomena of the turtles on their backs and regular balloon not charged with explosives is occupied by Crookes' vacuum tubes. Like to precession and nutation the excitement among the mackerel. During his nautical an aeronaut to reconnoiter the cloud realm, to trail torpe these spiral paths are constantly changing and producing career he never saw anything similar to it, nor did he ever does and cartridges, or to throw them in parachutes, and magnetic variations. He therefore infers that the magnetic before lay eyes on as many turtles and Spanish mackerel,

THE GEOLOGICAL HISTORY OF THE CATSKILLS.

In an article on the Physical Structure and Hypsometry of the Catskill Mountains, in the current number of the "My invention is based on discoveries in meteorological American Journal of Science and Arts, Professor Guyot states that the masses of rocks forming the Catskill Mountains were deposited in a gulf of the Devonian Sea comprised between the Adirondack plateau and the Green Mountain hail, and into cyclones and tornadoes illuminated by mag- range, including the low silurian ridges between the Hudson and the foot of the Catskills, all of which were probably emerged when the Devonian age began. Most of New the metal sheets and the wall or structure at all points, ex. steam into the atmosphere whenever found expedient, each ness of the sediments shows that the bottom of this gulf gradually subsided during that time to a depth of some 5,000 feet, constantly making room for new deposits. The presence of the gray conglomerate capping the highest hills proves that the deposition of these sediments continued into the subcarboniferous period, after which they were upage. But the peculiar situation which sheltered it from Elizabeth Dark, Davis Collins, and George W. Nelson, the immediate effect of the force which was in play, the lateral pressure arising from the sinking of the bed of the Atlantic, modified the hypsometric form of that portion of the plants. It is simple, convenient, and not liable to get heaval began, the domain of the Catskills was secluded from the ocean by large tracts of the pre-existing lands; the Adirondack plateau on the north, New England, and the themselves in a measure, served as a barrier against a strong

> Farther south, however, no obstacle intervening, the force fessor Guyot is inclined to attribute not only the folding of An improved rotary plow has been patented by Mr. the numerous Appalachian chains, but also the remarkable swell to their greatest average height in the region of the sources of the Susquehanna, Alleghany, and Genesee rivers. To this pushing northwest and northward of the land, and of western New York may be in great measure attributed. The Catskills would thus have been subjected to a pushing action, from three or four opposite directions, by the rising lands-from the Adirondack plateau on the north, from the Green Mountains on the east, and from the rising Appalachians on the southeast and south; and hence, perhaps, their superior elevation above all the surrounding lands. On the general in the Catskills, protecting the underlying strata of preserved, in a great measure, their primitive elevation.

Eighty Square Miles of Turtles.

mous length of ten feet. They were buried singly, or each The Galveston News, of June 29, reports that between The invention consists in sending balloons into the cloud, in separate graves. Resting against one of the coffins was Sabine and Calcasieu, in the Gulf of Mexico, June 22, the schooner James Andrews encountered a vast multitude of green turtles, many of them very large, and all of them on conclude that this giant race were sun worshipers. their backs. Captain J. B. Rodgers, owner of the schooner, states that the schooner was lying on and off, and from observation it was estimated that the water covered by these At a recent meeting of the London Physical Society, Dr. turtles formed an area of eight miles in width and ten miles Captain Rodgers is anxious to have nautical men ex-

of pestilence and epidemics.

to explode or detonate them either from the balloon occu-poles will complete a cycle corresponding to the period of pied by the aeronaut or from the ground. precession. Dr. Shettle thinks that bodies exhibit magnetic

"Instead of a single balloon provided with explosives—say properties in proportion as they change the direction of the ten small torpedoes or cartridges, each charged with a half energy traversing them, and throw it into the spiral form. pound of dynamite, and arranged for simultaneous magneto- Terrestrial magnetism would be due to the solar radiance. electric explosion-I propose in some cases the employment On this hypothesis gravity would also be produced; so, like of small balloons in groups in the cloud region, each pro- wise, would the earth's rotation (by a kind of "magnetic

Electricity Affected by a Magnet.

The phenomenon lately discovered by Hall of the action of a magnet in altering the path of a current of electricity in the conductor which carries it, has formed the starting point for two investigations, which have appeared separately in the Wiener Anzeiger, by Boltzmann and Von Ettingshausen vided with explosives and arranged for simultaneous explo-whirl"), electricity, tornadoes, cyclones, water-spouts, and respectively, in which they point out that this discovery sion or detonation by either electric or mechanical force; whirlwinds. Moreover, this "spiral energy" would seem may be applied to determine the absolute velocity of elec-and I contemplate not only to precipitate rain fall, but also to operate throughout the whole universe.