ENGINEERING INVENTIONS.

An injector has been patented by Mr. Elijah Ware, of Omaha, Neb. It has an ejecting cone, combination cone, and overflow pipe, in combination with a steam inlet valve, water valve, and an overflow valve adapted to be connected with the inlet port of the steam valve, so as to cause suction in the overflow pipe, and means for operating the three valves simul taneously, with other novel features,

A dredge has been patented by Mr. Henry O. Geiger, of Tacoma, Washington Ter. A shaft is arranged, within a suction pipe and provided with an Archimedean screw, there being mechanism for raising and lowering the pipe with its screw, with other novel features, the rotation of the screw agitating the sand, clay, or mad at the bottom of rivers, etc., so that it is forced to ascend the suction pipe.

A car coupling has been patented by Messrs. Levy and David Rosenthal, of Hudson, N. Y. The drawhead has spring-actuated doors and means for opening them, a spring-actuated drawer being adapted to slide beneath the drawhead and support the link, a shaft journaled beneath the sill of the car carrying ratchet wheels being connected with the drawer, and a pawl-carrying shaft being adapted for co-operation with the ratchet-carrying shaft.

Feeding air to steam boiler furnaces forms the subject of a patent issued to Messrs. Alanson Horton and Benjamin J. Wright, of Hammondsport, N.Y. The invention consists of a fan or its equivalent connected to the boiler, the fan being provided with means for regulating the amount of air supplied to the boiler, whereby the draught may be greatly increased without increasing the height of the stack, and all kinds of fuel can be better burned.

AGRICULTURAL INVENTIONS.

A lister cultivator has been patented by Mr. Joseph P. Lutes, of Ridgeley, Mo. It is specially adapted for working listed corn, and is designed to work the corn in the gatters or furrows made by the lister, and at the same time smooth the ridges between the corn and feed fresh soil to the same

A corn and cotton planter has been patented by Mr. Jesse A. Childs, of Coushatta, La. It has a reciprocating cylinder, whereby the distance between the hills may be exactly met, and a cut-off regulating mechanism for measuring with great exactness the quantity of seed discharged into each hill, with other novel features.

A combined cultivator and corn planter has been patented by Mr. Emil Westhoff, of Cuero, Texas. It is designed to be self-covering and adjustable as to the transverse and longitudinal space between the hills and rows, and to be regulated as to the material fed at each throw of the seed slide, and also to mark off the adjacent row as the machine advances.

A low-binding harvester has been patented by Messrs. J. C. and George A. Cunningham, of Washington, Kansas. It is so constructed that the grain is carried to the binding mechanism by means of a continuous endless carrier belt arranged upon a level with or slightly above that of the binding table, one of the main objects being to carry the grain directly to the binding table.

MISCELLANEOUS INVENTIONS.

An improvement in the ornamentation of wall paper has been patented by Mr. Charles H. Provost, of Brooklyn, N. Y. The invention consists in the method of distributing on a wet or dry ground color or bronze, so that the bronze will appear upon the color, and then the paper is embossed.

A method of and apparatus for making fibrous vessels, such as pails, tubs, etc., has been patented by Mr. Leroy Tobey, of Penn Yan, N. Y. It consists in drawing fibrous material held in suspension, such as paper or rag pulp, on to a perforated form immersed in the liquid, continuing the suction afterward to dry the fiber, then soaking the vessel so formed in a hardening compound, and pressing and finishing.

A folding baby carriage has been patented by Mr. Charles Haller, of New York City. The invention covers an improvement on two former pa tented inventions of the same inventor, simplifying the construction of the carriage, and rendering it lighter, less liable to disarrangement, and more convenient in

A windmill has been patented by Mr. Hanford Reynolds, of Gifford, Ill. It is so constructed that its wings can be automatically adjusted in accordance with the force and direction of the wind and with the power required, and can be readily thrown in or out of action, the mill requiring no vane or other device for adjusting it in accordance with the direction of the

sections by endwise thrust of the spokes when wedged outward from the hub.

A device for stuffing mattresses has been patented by Mr. John R. De Haven, of Cloverport, Ky. It consists of a stand supporting loose slats ard a removable head piece, of side bars having points on one end, of bottom plates, and of top rods supported by the head piece and by a U-shaped frame pivoted to the stand, enabling an operator to fill a mattress tick rapidly and evenly.

A corset has been patented by Mr. Milton J. Roberts, of New York City. Its distinctive feature is that it is woven over a form into curvilinear contour out of wire strands, the meshes having a greater number of twists in some parts of the corset than in others, and the corset being designed especially to support the body and relieve the sufferings of the deformed or crippled, although otherwise advantageously applicable.

A knife cleaner has been patented by Mr. Robert W. Jamieson, of Prince Albert, Saskatchewan, Northwest Territory, Canada. The machine has two pairs of rubbing blocks, a lower pair for use first as cleaning blocks and an upper pair for use as polish-ing blocks, the blocks being faced with leather or other suitable fabric, to which the cleaning or polishing powder is supplied, by which the knives may be cleaned at both sides and the back, without strain on the handle

An artificial ear drum has been pa tented by Mr. Benjamin N. Huestis, of New York City It consists of a cup-shaped body having an annular flange and provided with a hollow stem closed at its outer end, which may be inserted or withdrawn without pain to the wearer, will be wholly invisible when worn, the wearer being able to sleep with comfort with the drum in position, it being designed to relieve deal ness to a greater extent than has heretofore been pos sible, and when the natural drum has been lost.

SCIENTIFIC AMERICAN BUILDING EDITION.

SEPTEMBER NUMBER.

TABLE OF CONTENTS.

- 1. Elegant Plate in Colors of a Twelve Hundred Dollar Cottage, with floor plans, specifications, sheet of details, bills of estimate, etc.
- 2. Plate in Colors, with specifications, estimate, and bill of materials, for a Southern Residence of moderate cost. An elegant design.
- 3. Handsome design for a Library Building.
- 4. Perspective view, with floor plans, for a Dwell-ing costing Five Thousand Dollars.
- 5. Drawing in perspective, with floor plans, for a Cottage costing Thirty-five Hundred Dollars.
- 6. Floor plans and perspective for a Country Store costing Two Thousand Dollars. 7. Perspective view and floor plans for a Resi-dence costing Four Thousand Dollars.
- A handsome Dwelling costing Four Thousand Two Hundred Dollars. Perspective and floor
- plans.
- 9. Perspective and floor plans for an Eighteen Hundred Dollar Cottage.
- Perspective view and floor plans of Grace Me-morial House, Providence, R. I., a School House, and Nursery. Cost, Four Thousand Dollars.
- 11. Suggestions in Decorative Art.
- 12. Sketch for a Seashore or Beach Dwelling. 13. Illustrations of Tenement Houses of moderate cost at Kansas City, Mo.
- 14. Examples of Suburban Houses at Hamilton Heights, Fort Hamilton, N. Y.
- 15. Floor plans, elevations, and perspective view of an Eight-room Ohio Dwelling, costing about Five Thousand Dollars.
- 16. Elegant design for a Bank Building at Knox-ville, Tenn.
- 17. Design of the Yankee Cottage now at the American Exhibition, London.
- Design for Elegant Residence of C. C. Bloom-field, Esq., Jackson, Mich. Two half page drawings, showing view in stair hall, perspect-ive, and floor plans.
- Interior view of Stable with horizontal floors and hygienic drainage. Three illustrations. 19 20. Design for G ant Monument, Riverside Pa k, New York. By H. A. Male.
- 21. Examples of Small City Houses at Paris.

Special.

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TO INVENTORS.

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INDEX OF INVENTIONS

For which Letters Patent of the United States were Granted

August 23, 1887,

AND EACH BEARING THAT DATE.

[See note at end of list about copies of these patents.]

Ba

B

Bi

Bo Bo Bo

B

R

R

B

B

B

Accordion. H. F. A. Wichmann	368,696
Air heater, F. Heller	368,767
Air or water purifying apparatus, J. W. James	
Anti-friction composition, I. P. Wendell 968,635,	368,636
Auger, H. C. Tevebaugh	368 ,626
Automatic gate, J. W. Condry	368,815
Battery. See Electrical battery. Secondary bat-	
tery.	
Bed, spring, J. H. Battcher	369 905
Bedding, retaining device for, W. I. Bunker	368 617
Bedstead, W. F. Bernstein	
Bellows attachment, W. E. Ryan	300,1,33
Binder, twine, A. J. Geer	368,665
Bit. See Bridle bit.	
Blind, window, J. Cahill	363,808
Boiler. See Steam boiler.	
Boiler, G. Bolton	368,645
Boiler, J. A. Svedberg	368,739
Boiler feed and steam trap, interchangeable. G.	
W. Baird	369 641
Boiler head and man hole, N. W. Pratt	960 011
Boiler tube, E. S. T. Kennedy	303,840
Boiler tube cleaner, H. L. Currier	
Boilers, combined drum head and manifold for	
sectional steam, Martinez & Muller	368,600
Boilers, connecting box for sectional steam, O.	
Muller	
Boilers, connecting box for sectional steam, N.	,
W. Pratt	969 616
Boilers, drumhead manifold for sectional steam,	
C. P. Higgins	368,585
Boilers, manifold for water tube, N. W. Pratt,	
368,612, 363,614,	368,615
Boilers, etc., scaling tool for, G. Cowie, Jr	368,876
Bolt. See Flour bolt.	
Book covers, etc., imitation bronze or other orna-	
mental plate for, C. Wagenfohr	
Books, protector for the covers of, Henry, Jr., &	000,171
Brown	000 000
Brown Boot or shoe burnishing machine, S. Ross, Jr	000,000
Boot or shoe heel, A. A. Marquette	368,676
Boots or shoes, buttonhole piece for, J. Reece	
Boots or shoes, metal plated rubber heel for, F. D.	
Boots or shoes, metal plated rubber neer for, F. D.	
Hayward	868,584
Hayward Bottle stopper, G. A. Gessner	868,584 368,712
Hayward Bottle stopper, G. A. Gessner Bottle stopping mechanism, G. A. Gessner	868,584 368,712
Hayward Bottle stopper, G. A. Gessner Bottle stopping mechanism, G. A. Gessner Box. See Cartridge box. Paper box.	368,584 368,712 368,711
Hayward Bottle stopper, G. A. Gessner Bottle stopping mechanism, G. A. Gessner Box. See Cartridge box. Paper box. Brackets, attachment for towel, A. McKanna	368,584 368,712 368,711
Hayward Bottle stopper, G. A. Gessner Bottle stopping mechanism, G. A. Gessner Box. See Cartridge box. Paper box. Brackets, attachment for towel, A. McKanna Brake. See Car brake.	868,584 368,712 368,711 368,728
Hayward Bottle stopper, G. A. Gessner Bottle stopping mechanism, G. A. Gessner Box. See Cartridge box. Paper box. Brackets, attachment for towel, A. McKanna Brake. See Car brake. Brick kiln, L. Manning.	368,584 368,712 368,711 368,728 368,775
Hayward Bottle stopper, G. A. Gessner Bottle stopping mechanism, G. A. Gessner Box. See Cartridge box. Paper box. Brackets, attachment for towel, A. McKanna Brake. See Car brake. Brick kiln, L. Manning Bridge gate, draw, F. Gerard	368,584 368,712 368,711 368,728 368,775 368,775 306,006
Hayward Bottle stopper, G. A. Gessner Bottle stopping mechanism, G. A. Gessner Box. See Cartridge box. Paper box. Brackets, attachment for towel, A. McKanna Brake. See Car brake. Brick kiln, L. Manning.	368,584 368,712 368,711 368,728 368,775 368,775 306,006
Hayward Bottle stopper, G. A. Gessner Bottle stopping mechanism, G. A. Gessner Box. See Cartridge box. Paper box. Brackets, attachment for towel, A. McKanna Brake. See Car brake. Brick kiln, L. Manning. Bridge gate, draw, F. Gerard Bride, E. McEvers.	368,584 368,712 368,711 368,723 368,775 308,006 368,601
Hayward Bottle stopper, G. A. Gessner. Bottle stopping mechanism, G. A. Gessner Box. See Cartridge box. Paper box. Brackets, attachment for towel, A. McKanna Brake. See Car brake. Brick kiln, L. Manning. Bridge gate, draw, F. Gerard Bridle, E. McEvers. Bridle, Dit, J. A. Manning.	368,584 368,712 368,711 368,723 368,775 368,606 368,601 368,776
Hayward Bottle stopper, G. A. Gessner Bottle stopping mechanism, G. A. Gessner Box. See Cartridge box. Paper box. Brackets, attachment for towel, A. McKanna Bracket. See Car brake. Brick kiln, L. Manning. Bridge gate, draw, F. Gerard Bridle, E. McEvers. Bridle bit, J. A. Manning	368,584 368,712 368,711 368,728 368,775 368,601 368,776 368,776 368,550
Hayward Bottle stopper, G. A. Gessner Bottle stoppeng mechanism, G. A. Gessner Box. See Cartridge box. Paper box. Brackets, attachment for towel, A. McKanna Brake. See Car brake. Brick kiln, L. Manning Bridge gate, draw, F. Gerard Bridle, E. McEvers. Bridle bit, J. A. Manning Broom, L. Pelton Brush, fountain, H. A. Beaumont	368,584 368,712 368,711 368,723 368,775 396,606 368,776 368,776 368,550 368,748
Hayward Bottle stopper, G. A. Gessner. Bottle stoppeng mechanism, G. A. Gessner Box. See Cartridge box. Paper box. Brackets, attachment for towel, A. McKanna Brake. See Car brake. Brick kiln, L. Manning. Bridge gate, draw, F. Gerard Bridle, E. McEvers Bridle bit, J. A. Manning. Broom, L. Pelton Brush, fountain, H. A. Beaumont Button fastening machine, E. O. Ely	368,584 368,712 368,711 368,713 368,728 368,775 368,775 368,606 368,776 368,550 368,788 368,550 368,748 368,659
Hayward Bottle stopper, G. A. Gessner Bottle stopper, G. A. Gessner Bottle stopping mechanism, G. A. Gessner Brax. See Cartridge box. Paper box. Brake. See Car brake. Brick kiln, L. Manning. Bridge gate, draw, F. Gerard Bridle, E. McEvers. Bridle, J. A. Manning. Broom, L. Pelton Brush, fountain, H. A. Beaumont Button fastening machine, E. O. Ely Button fastening machine, J. H. Vinton	368,584 368,712 368,711 368,728 968,606 368,601 368,601 368,676 368,560 368,560 368,661 368,659 368,659
Hayward Bottle stopper, G. A. Gessner Bottle stopping mechanism, G. A. Gessner Box. See Cartridge box. Paper box. Brackets, attachment for towel, A. McKanna Brake. See Car brake. Brick kiln, L. Manning Bridge gate, draw, F. Gerard Bridle, E. McEvers. Bridle bit, J. A. Manning Broom, L. Pelton Brush, fountain, H. A. Beaumont Button fastening machine, E. O. Ely Button fastening machine, J. H. Vinton Button setting machine, E. H. Taylor	368,584 368,712 368,711 368,728 968,606 368,601 368,601 368,676 368,560 368,560 368,661 368,659 368,659
Hayward Bottle stopper, G. A. Gessner Bottle stoppeng mechanism, G. A. Gessner Box. See Cartridge box. Paper box. Brackets, attachment for towel, A. McKanna Brake. See Car brake. Brick kiln, L. Manning Bridge gate, draw, F. Gerard Bridle, E. McEvers Bridle bit, J. A. Manning Broom, L. Pelton Brush, fountain, H. A. Beaumont Button fastening machine, E. O. Ely Button fastening machine, J. H. Vinton Button setting machine, E. H. Taylor Camera. See Photographic camera.	368,584 368,712 368,711 368,728 368,775 368,601 368,601 368,601 368,601 368,560 368,776 368,776 368,776 368,776 368,760 368,620 368,621 368,625
Hayward Bottle stopper, G. A. Gessner Bottle stopper, G. A. Gessner Bottle stopper, mechanism, G. A. Gessner Box. See Cartridge box. Paper box. Brackets, attachment for towel, A. McKanna Brake. See Car brake. Bridk kiln, L. Manning Bridge gate, draw, F. Gerard Bridge gate, draw, F. Gerard Bridge it, J. A. Manning Broom, L. Pelton Brush, fountain, H. A. Beaumont Button fastening machine, E. O. Ely Button fastening machine, J. H. Vinton Button setting machine, E. H. Taylor. Camera. See Photographic camera. Canal lock, T. Sidensol.	368,584 368,712 368,711 368,728 968,775 988,606 368,601 368,676 368,650 368,650 368,650 368,659 368,659 368,659 368,659 368,659 368,659
Hayward Bottle stopper, G. A. Gessner Bottle stopper, G. A. Gessner Bottle stopping mechanism, G. A. Gessner Brackets, attachment for towel, A. McKanna Brackets, attachment for towel, A. McKanna Brackets, attachment for towel, A. McKanna Bridge gate, draw, F. Gerard Bridge gate, draw, F. Gerard Bridle, E. McEvers Bridle bit, J. A. Manning Broom, L. Pelton Brush, fountain, H. A. Beaumont Button fastening machine, E. O. Ely Button fastening machine, E. H. Taylor Camera. See Photographic camera. Canal lock, T. Sidensol. Cane and cigar and cigarette case, combined, G.	868,584 368,712 368,711 368,728 968,606 368,671 368,776 368,676 368,776 368,776 368,776 368,670 368,778 368,659 368,641 369,625 368,660
Hayward Bottle stopper, G. A. Gessner Bottle stopper, G. A. Gessner Bottle stopping mechanism, G. A. Gessner Box. See Cartridge box. Paper box. Brackets, attachment for towel, A. McKanna Brackets, attachment for towel, A. McKanna Bridke L. Car brake. Bridge gate, draw, F. Gerard Bridle, E. McEvers. Bridle bit, J. A. Manning Broom, L. Pelton Brush, fountain, H. A. Beaumont Button fastening machine, E. O. Ely Button fastening machine, J. H. Vinton Button setting machine, E. H. Taylor Camera. See Photographic camera. Cane and cigar and cigarette case, combined, G. B. Fowler.	868,584 368,712 368,711 368,728 368,672 368,676 368,676 368,776 368,776 368,776 368,776 368,776 368,670 368,671 369,621 369,621 369,621 369,621 369,621
Hayward Bottle stopper, G. A. Gessner Bottle stopper, G. A. Gessner Bottle stopping mechanism, G. A. Gessner Brackets, attachment for towel, A. McKanna Brackets, attachment for towel, A. McKanna Brackets, attachment for towel, A. McKanna Bridge gate, draw, F. Gerard Bridge gate, draw, F. Gerard Bridle, E. McEvers Bridle bit, J. A. Manning Broom, L. Pelton Brush, fountain, H. A. Beaumont Button fastening machine, E. O. Ely Button fastening machine, E. H. Taylor Camera. See Photographic camera. Canal lock, T. Sidensol. Cane and cigar and cigarette case, combined, G.	868,584 368,712 368,711 368,728 368,672 368,676 368,676 368,776 368,776 368,776 368,776 368,776 368,670 368,671 369,621 369,621 369,621 369,621 369,621
Hayward Bottle stopper, G. A. Gessner. Bottle stopper, G. A. Gessner. Bottle stopper, G. A. Gessner. Brottle stopper, G. A. Gessner. Brackets, attachment for towel, A. McKanna Brackets, attachment for towel, A. McKanna. Brackets, attachment for towel, A. McKanna. Bridge gate, draw, F. Gerard. Bridge gate, draw, F. Gerard. Bridle, E. McEvers. Bridle bit, J. A. Manning. Broom, L. Pelton. Brush, fountain, H. A. Beaumont. Button fastening machine, E. O. Ely. Button fastening machine, E. H. Taylor. Camera. See Photographic camera. Canal lock, T. Sidensol. Cane and cigar and cigarette case, combined, G. B. Fowler. Car brake, J. C. Larkin. Car brake, and starter. D. Goff.	868,584 368,712 368,711 368,778 986,666 368,601 368,776 368,660 963,748 368,659 368,758 369,758 369,759 369,759 369,759 369,759 369,759 369,759 369,759 369,759 369,75
Hayward Bottle stopper, G. A. Gessner. Bottle stopper, G. A. Gessner. Bottle stopper, G. A. Gessner. Brottle stopper, G. A. Gessner. Brackets, attachment for towel, A. McKanna Brackets, attachment for towel, A. McKanna. Brackets, attachment for towel, A. McKanna. Bridge gate, draw, F. Gerard. Bridge gate, draw, F. Gerard. Bridle, E. McEvers. Bridle bit, J. A. Manning. Broom, L. Pelton. Brush, fountain, H. A. Beaumont. Button fastening machine, E. O. Ely. Button fastening machine, E. H. Taylor. Camera. See Photographic camera. Canal lock, T. Sidensol. Cane and cigar and cigarette case, combined, G. B. Fowler. Car brake, J. C. Larkin. Car brake, and starter. D. Goff.	868,584 368,712 368,711 368,778 986,666 368,601 368,776 368,660 963,748 368,659 368,758 369,758 369,759 369,759 369,759 369,759 369,759 369,759 369,759 369,759 369,75
Hayward	868,584 368,712 368,711 368,778 988,601 368,601 368,601 368,601 368,601 368,601 368,603 368,604 368,669 368,669 368,669 368,669 368,669 368,673 368,673 368,673 368,674
Hayward Bottle stopper, G. A. Gessner. Bottle stopper, G. A. Gessner. Bottle stopper, mechanism, G. A. Gessner. Brox. See Cartridge box. Paper box. Brackets, attachment for towel, A. McKanna Brake. See Car brake. Bridk klin, L. Manning. Bridge gate, draw, F. Gerard. Bridge jate, draw, F. Gerard. Bridge jate, draw, F. Gerard. Bridge bit, J. A. Manning. Broom, L. Pelton. Brush, fountain, H. A. Beaumont. Button fastening machine, E. O. Ely. Button fastening machine, E. O. Ely. Button fastening machine, J. H. Vinton. Button fastening machine, E. H. Taylor. Camera. See Photographic camera. Canal lock, T. Sidensol. Can e and cigar and cigarette case, combined, G. B. Fowler. Car brake, J. C. Larkin. Car brake and starter, D. Goff. Car coupling, W. J. Evans. Car coupling, J. A. Fouts.	868,584 368,712 368,711 368,728 968,775 968,606 368,601 368,760 968,760 968,748 368,760 968,748 368,627 368,641 368,625 368,680 965,823 368,783 368,783 368,783 368,79
Hayward Bottle stopper, G. A. Gessner. Bottle stopper, G. A. Gessner. Bottle stopper, G. A. Gessner. Brake see Carbridge box. Paper box. Brackets, attachment for towel, A. McKanna Brake. See Carbrake. Bridge gate, draw, F. Gerard. Bridge gate, draw, F. Gerard. Bridge gate, draw, F. Gerard. Bridge ft, J. A. Manning. Broom, L. Pelton Brush, fountain, H. A. Beaumont. Button fastening machine, E. O. Ely. Button fastening machine, E. O. Ely. Button fastening machine, E. M. Vinton. Button fastening machine, E. H. Taylor. Camera. See Photographic camera. Canal lock, T. Sidensol. Car brake, J. C. Larkin. Car brake, J. C. Larkin. Car coupling, W. J. Evans. Car coupling, M. J. Evans. Car coupling, N. Muslar.	868,584 368,712 368,711 368,773 968,606 368,601 368,601 368,601 368,601 368,625 368,641 369,625 368,641 369,625 368,641 369,625 368,641 369,625 368,641 369,625
Hayward	868,584 368,712 368,711 368,775 998,606 368,601 368,601 368,650 368,641 368,650 368,641 368,650 368,641 368,650 368,641 368,650 368,641 368,650 368,641 368,650 368,641 368,650 368,641 368,650 368,641 368,650 368,641 368,775
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A wheel for grooving machines has been patented by Mr. Sabin F. Brown, of Dawson, Minn. It is for grooving together tin and other sheet metal by passing the wheel once forward and back over the seam, and is made in three parts, one part to be lowered to stand flush with the edges of the other parts. or raised to form the offset, the movable part of the wheel being acted upon by an eccentric and crank.

A suspender or other buckle has been patented by Mr. Charles R. Harris, of Williamsport. Pa. This invention relates to combined buckles and lower hooks or loops capable of manipulation or ad-justment from the front, and in which the backle frame is made of wire and has combined with it a rear toothed cross bar that engages with the web passing through the buckle frame.

A vehicle hub has been patented by Mr. Burwell C. H. Simpson, of Lebanon, Tenn. This invention covers a novel construction, whereby the spokes may be securely clamped, and so as to allow renewal of either the spokes or felly sections, and also to allow tightening of the tire by expansion of the felly

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