

most recent type of coal- and gas-fired reheating furnaces, mechanical chargers, and various appliances for handling the materials at the reheating furnaces and transferring them to the mills. Section IV. describes the properties of finished steel. The influence of impurities on the mechanical properties of steel is thoroughly discussed, as is also the important subject of its heat treatment and the pyrometers used in connection with the same. The relation of microstructure to heat treatment is fully illustrated by numerous micro-photographs, and the latest theories on hardening, tempering, and other matters of much interest and importance are discussed. The question of specifications, both as regards chemical composition and mechanical properties of various steels, is treated in an appendix. Other appendices contain valuable matter on the relation of percentage of carbon to tensile stress, and on the rapid determination of phosphorus and manganese.

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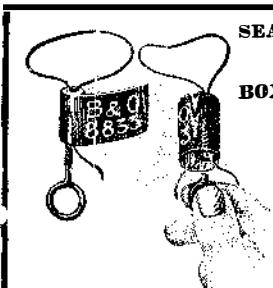
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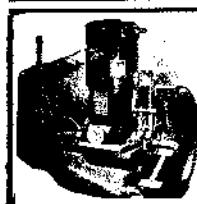
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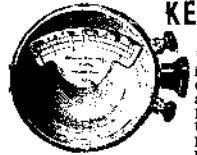
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Self clearing rake, J. Morrison, Jr.	758,267
Separator. See Mineral separator.	
Sewing machine, button, R. L. Lyons	758,326
Sewing machine, overseaming and welting, F. Malsch	758,264
Sewing machine thread holding mechanism, J. H. & J. B. Ursprung	758,121
Sewing machine work clamp, buttonhole, E. B. Allen	758,036
Shade and curtain fixture bracket, P. Gallaher	758,357
Shade bracket and curtain rod holder, combined, J. E. Verkler	758,158
Shade retaining device, window, H. Witte	758,341
Shade roller and curtain pole holder, combined, W. A. Nordling	758,098
Shade roller bracket and curtain pole support, combined, D. J. Cooke	758,419
Shaft carrier or thrill tug, D. B. Shirky	758,566
Shaft collar, C. H. Melius	758,549
Shaving paper holder, W. P. Nelson	758,096
Sheet feeder, pneumatic, A. Lagerman	758,453
Sheet metal vessels, forming, Blevins & Whittaker	758,503
Sidewalk, E. A. Langenbach	758,184
Sidewalk cleaner, T. C. Hiles	758,071
Sign frame, C. G. Mixer	758,055
Sign switch mechanism, electric, F. S. Wahl	758,342
Signal receiving apparatus, alternating current, G. W. Pickard	758,468
Signaling and operating system, H. C. W. Graham	758,527
Signaling apparatus, block, J. A. Lehr	758,541
Sink bracket, J. J. Mahoney	758,545
Skirt supporter and shirt waist holder, C. B. Peterson	758,146
Solutions, preparing highly diluted, E. Joseph	758,150
Sorting machine, Rettich & Berger	758,101
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Speed changing mechanism, C. J. Reed	758,474
Speed indicator, Moore & O'Neill	758,561
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Stacker, pneumatic straw, Walsh & Bretney	758,606
Stacker, straw, J. C. Hendricks	758,136
Standard, A. M. Moylan	758,039
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Telephone receiver, M. R. Hutchison	758,363
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Tool, compound, C. H. Peck	758,100
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Toy, A. M. Siebelist	758,567
Toy elevated railway track, H. C. Ives	758,448
Toy gun, J. B. Mason	758,374
Trace end supporter, D. M. Allen	758,495
Track claw, A. P. Nichols	758,462
Track gauge, A. P. Nichols	758,461
Track sanding device, W. H. Kilbourn	758,141
Train control system, H. E. White	758,170
Trap, See Animal trap	
Traveling case, W. D. Chase	758,228
Truck frame, railway car, C. T. Westlake	758,320
Truck dowel pin and lift, C. Rangnow	758,383
Truss, adjustable, M. O. Hallowell	758,110
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Type writer, C. Wasmuth	758,571
Type writer adding attachment, J. W. Magness	758,371
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Type writing machine ribbon feed mechanism, E. G. Latta	758,455
Undergarment, G. A. Mattern	758,375
Unloading device, G. C. Pace	758,274
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Vending machine, coin controlled mechanism, cigar, C. M. Dodson	758,204
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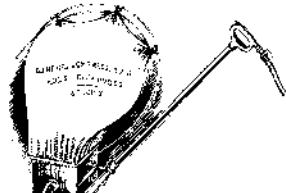
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