

called hyper-eutectoid; that with less is called hypo-eutectoid. Arnold's names "saturated," "unsaturated," and "supersaturated," for eutectoid, hypo-eutectoid, and hyper-eutectoid steel respectively, have considerable industrial use in English-speaking countries, but are avoided by most scientific writers on the ground that they are misleading, because, *e.g.* there is only one specific temperature,  $A_1$ , at which eutectoid steel is actually saturated, and, if any other temperature is in mind, that steel is not saturated. Above  $A_1$  it is clearly under saturated.

The objection to the names sorbite, troostite, martensite, and austenite, that each of them covers steel of a wide range of carbon content, is to be dismissed because a like objection applies with equal force to every generic name in existence.

The theoretical matter in the report is, it is explained, given solely for exposition, and the committee disclaims the intent to impose any theory. The report was offered for adoption subject to this disclaimer, on the ground that the adoption of theories was beyond the powers of a Congress.



BIBLIOTECA

## INDEX.

- ABEL'S reagent, 114.  
 Aggregate, definition of, 288.  
 Akerman, on contraction of volume, 48.  
   theory of tempering, 34.  
 Allotropic transformations, 21, 29.  
 Alloys, copper and tin, equilibrium curves of, 40.  
   gold and antimony, structure of, 53, 54.  
   and bismuth, structure of, 51, 52.  
   and silver, structure of, 9.  
   silver and copper, structure of, 22.  
     equilibrium curves of, 24.  
 Aluminium, alloys of, with gold, 9.  
 Amorphous bodies, polishing of, 65, 71.  
 Analysis, microscopic, of steels, 104.  
 "Anatomical" metallography, 4, 5.  
 Andrews, on etching, 168.  
 Annealing carbon, 170.  
 Antimony and gold alloys, structure of, 53, 54.  
 Apparatus for photomicrography, 116.  
 Arnold, on equilibrium curves, 172.  
   on graphite, 31.  
   on iron carbide, 19.  
   on iron sulphide, 51.  
 Arrest points in iron, 21.  
 Attwood, on attrition, 70.  
 Auerbach, theory of deformation, 60, 61.  
 Austenite, 187.  
   definition of, 290.  
   relative softness of, 191.  
   typical, 37.  
 BALL, on allotropy of iron, 200.  
   discovery of critical points by, 213.  
 Barrett, on recalescence, 30, 199.  
 Bas-relief polishing, 110.  
 Baumann sulphur print process, 158, 269.  
 Behrens, on bas-relief polishing, 110.  
   on cast silver, 5.  
   on copper-tin alloys, 41.  
   on fusibility curves, 41.  
   on hardness of cementite, 172.  
   on heat-tinting, 12.  
   on martensite, 181.  
 Beilby, on development of scratches, 86.  
   on problems of polishing, 59.  
   on sliding-planes, 73.  
   on spicular structure, 89.  
 Benedicks, on ferronite, 290.  
   on temperature of arrest point, 21.  
 Bergmann, on allotropy of iron, 29.  
 "Biological" metallography, 4, 19.  
 Bismuth and gold alloy, structure of, 51, 52.  
 Blowhole segregation, 253.  
 Bravais, theory of polishing, 89.  
 Brearley, on heat-treatment, 146.  
 Brewster, on attrition, 70.



- Brinell, on method of testing, 30.  
on recalescence, 30.  
Bronzes, structure of, 36, 42, 48.  
"Burnt" steel, 145, 243.
- CALVERT, on calorific conductivity, 38.  
Campion, on effect of heating on structure, 145.  
Carbon, combined, in pig-iron, 162.  
Carbon diagram. *See* Iron-carbon diagram.  
Carling microscope, 126.  
Carpenter, on arrest points, 21, 285.  
Cartaud, on crystallography of iron, 203.  
on etching reagents, 113.  
on iron-carbon diagram, 276.  
Case-hardening, 153.  
Cementite, 170.  
definition of, 294.  
independent, 170.  
Cesaro, on attrition, 76.  
Charpy, on fusibility curves, 41.  
Chemical developers of structure, 85, 134.  
Cleavage planes, 8.  
"Coco" as a lubricant, 112.  
Codron, on planing, 77.  
Conchoidal fractures, 64.  
Constituents, microscopic, identification of, 194.  
nomenclature of, 287.  
primary, of carbon steels, 166.  
Copper and silver alloys, structure of, 22.  
tin alloys, equilibrium curves of, 40.  
Critical changes, 20.  
Crystalline bodies, polishing of, 73, 76.  
deformation, during polishing, 73.  
Curie, on allotropy of iron, 200.
- DECHARME, on polishing figures, 69.  
Deering, on iron carbides, 19.
- Definitions of micro-constituents, 286.  
Deformation during polishing, 73.  
under penetration, 60.  
"Dermis" of bodies, 88.  
Desch, on metallography, 146.  
Developers, chemical and mechanical, 85, 86.  
Diamantine powder, 188.  
Diseases of metals, 49.  
Distortion of metals in the cold, 137.
- ELECTRO-DEPOSITED ferrite, 283.  
Emery paper, 132.  
preparation of, 106.  
"Epidermis" of bodies, 89.  
Etching, 110, 113.  
reagents, 134.  
Eutectic alloy, 24, 31, 307.  
Ewing, on slip-bands, 73.
- FERRITE, 166.  
definition of, 298.  
pure electro-deposited, 283.  
typical, 199.  
Ferronite, definition of, 290, 301.  
Ferrous sulphide, 307. *See also* Segregation.  
Finishing polish, 84.  
Förster, on iron carbide, 19.  
Foucault, on polishing of lens, 58.  
Frémont, on cleavage, 79.  
experiments by, 61.  
on internal distortion, 102.  
on mechanical developers, 86.  
Fresnel, on pearlite, 171.  
Fuess polishing machine, 107.  
Fusion as a critical change, 20.
- GELATINE as a reagent, 11.  
Ghost-lines, 247.  
Gold alloys. *See* Alloys.  
rouges, 107.  
Gore, on contraction of steel, 30.  
Graphite, definition of, 303.  
Grinding and polishing, 59, 132.  
Grobot, samples supplied by, 239.  
Guerhard, on Luder's lines, 86.  
Guillemin, on fusibility curves, 41.  
on temper colours, 12.

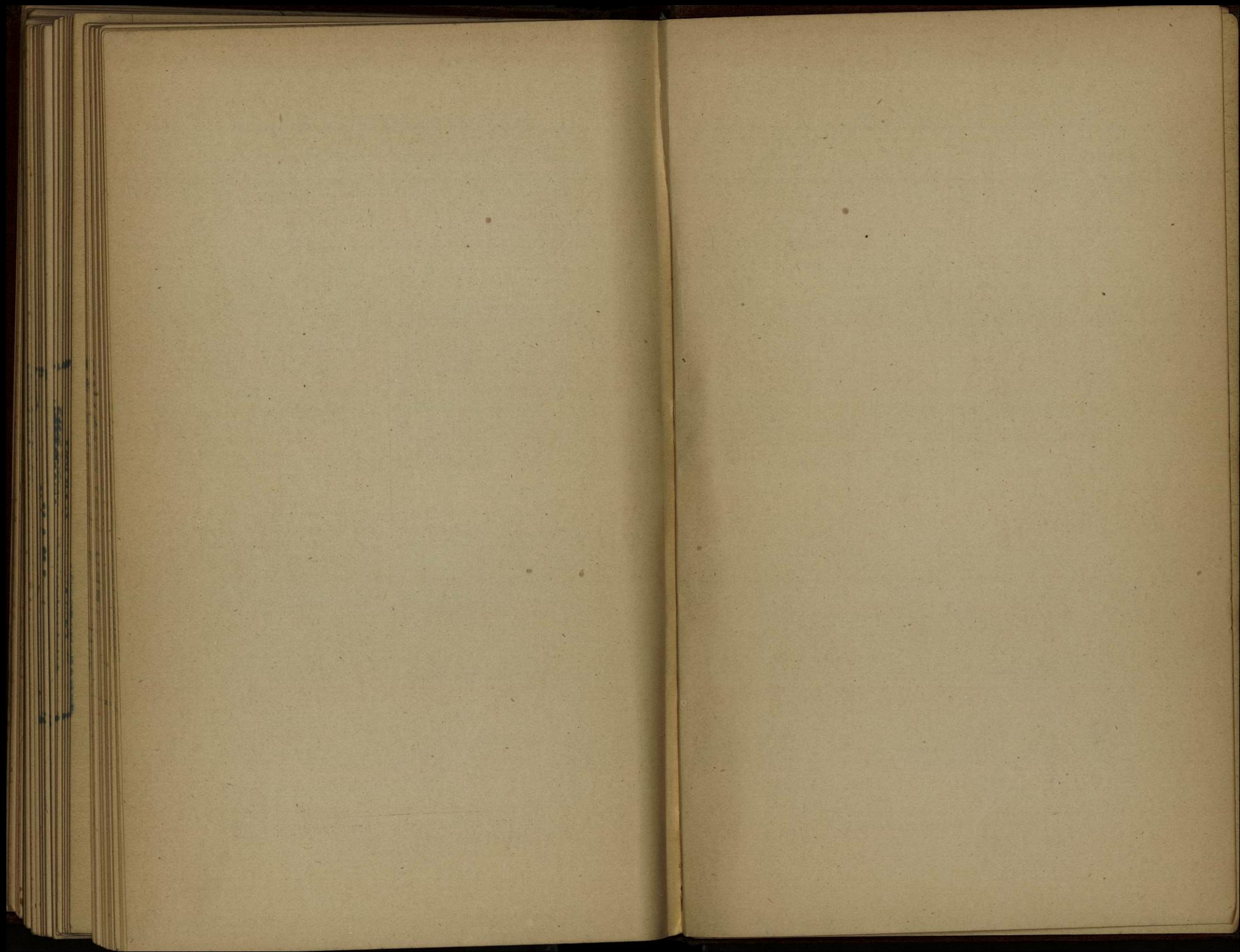
- HADFIELD, analysis of Swedish steel, 202.  
hardness of manganese steel, 193.  
Hardenite, 184.  
definition of, 301.  
Hardness, determinations of, by needles, 14.  
Hartmann on logarithmic spirals, 63.  
Hausner on planing, 77.  
Heat-tinting, 11, 266, 271.  
Heat-treatment of steel, 143.  
Henrivaux, on oxalate rouge, 107.  
Herschel on polishing of lens, 58.  
Hertz, theory of deformation, 60.  
Heterogeneous bodies, 9.  
Heycock, on fusibility curves, 23.  
Heyn, on sulphur prints, 158, 267.  
Heyn's reagent, 168.  
"Histological" micrography, 2.  
Homogeneous bodies, 5.  
Howe, on ferrite, 166.  
on hardenite, 184.  
on pearlite, 17.
- IGEWSKY'S reagent, 102, 174.  
Illumination of specimens, 122.  
Incrustation during polishing, 95.  
Independent cementite, 170.  
International Testing Association, report on nomenclature, 287.  
Iodine tincture for etching, 167.  
Iron, allotropic changes in, 21, 29.  
carbide, 19.  
Iron-carbon diagram, 274, 275, 290.  
Iron, pure, cooling curve of, 22.  
transformation curves of, 275.  
Irreversible transformations, 20.
- JANNETTAZ, on attrition, 75.  
Jenkin, on dry rouge polishing, 95.  
Johnson, on calorific conductivity, 38.  
Juptner, on iron-carbon diagram, 274.
- KOURBATOFF'S reagents, 134.
- LAW, on sulphides, 256.  
Le Chatelier, on copper-tin alloys, 41.  
on isomerism in silver, 48.  
on physico-chemistry, 274.  
on preparation of polishing powders, 85.  
on reagents, 10.  
on theory of solution, 23.  
Ledebur, on cementite, 171.  
Ledeburite, definition of, 289.  
Levol, on eutectic alloys, 24, 26.  
Lévy, on martensite, 182.  
on sulphides, 256.  
Liquorice decoction, 16, 112.  
Lodge, on electric conductivity, 38.  
Luder's lines, 86, 87.  
Lumière orthographic plates, 120.
- MACHINE polishing, 125.  
Main structure, 130.  
Malleable cast-iron, 164.  
Mallard, on isomerism, 48.  
on theory of polishing, 89.  
Manganese sulphide, 150, 307.  
*See also* Segregation.  
Margot, on adhesion phenomena, 90.  
Martens, on conchoidal fractures, 64.  
on martensite, 181.  
on polishing, 110.  
on polishing machine, 107.  
on preparation of surfaces, 105.  
on reagents, 114.  
on scratching, 76.  
on Spiegeleisen, 12, 21.  
on transformations of iron, 200.  
Martensite, 181, 296.  
typical, 36.  
Mechanical developers, 86.  
Mechanics of polishing, 58.  
Metals, analogy with living organisms, 2.  
chemical characters of, 4.  
diseases of, 49.  
optical characters of, 4.  
Metallography, definition of, 1.  
practical applications of, 129.  
Metaral, definition of, 288.  
Micrographic analysis, 104.  
Microscope, the, 116, 121.



- Mugge, on transition networks, 73.  
 Muller, on cementite, 172.  
 on iron carbide, 18.  
 Mylius, on iron carbide, 19.
- NATCHET microscope, 116.  
 Neumann lines, 78, 99.  
 Neville, on fusibility curves, 23.  
 Nitric acid for etching, 167.  
 Nomenclature of micro-constituents, 287.
- OPTICAL characters of metals, 4.  
 Osmond, on iron carbide, 19.  
 Osmondite, 290, 299.  
 Overheating of steel, 243.  
 Oxide films, 11.
- "PATHOLOGICAL" metallography, 4, 49.  
 Patinas, 11.  
 Pearlite, 170.  
 definition of, 301.  
 differentiation of, 16.  
 granular, typical, 34.  
 lamellar, typical, 18.  
 structure of, 17.  
 Penetration, deformation by, 60.  
 Phosphide of iron, 160.  
 Phosphorus in pig-iron, 159. *See also* Segregation.  
 Photographic plates, 120.  
 Photomicrography, apparatus for, 116.  
 Polish attack, 110, 112.  
 Polishing machines, 125.  
 Stead's, 127.  
 methods of, 110, 133.  
 preparatory, 105.  
 rough, 104.  
 science of, 58.  
 Primary constituents of steel, 166.  
 Prinz, on attrition, 70.
- QUENCHING, influence of, 208.
- RAYLEIGH, on physics of polishing, 59.  
 Read, on iron carbide, 19.  
 Reagents for etching, 112, 134.  
 Recalescence, 30.
- Reheating, influence of, 207.  
 Reversible transformation, 20.  
 Roberts - Austen, on fusibility curves, 23.  
 on gold alloys, 9, 54.  
 on iron-carbon diagram, 274.  
 on recalescence in silver, 48.  
 on report of Alloys Committee, 274.  
 on tenacity, 38.  
 Rogers, on sulphur prints, 159, 270.  
 Rohl's ternary eutectic, 257.  
 Roozeboom diagram, 275.  
 Rosenhain, on slip-bands, 73.  
 Rough polishing, 104.  
 Rupture, lines of, in polishing, 65.
- SAMPLES, mounting of, 116.  
 Saturation, defined, 307.  
 Sauveur, on etching, 114.  
 on heat-treatment, 57.  
 on microstructure of steel, 274.  
 on steadite, 290.  
 Scaling, 101.  
 Schlessing, on preparing powders, 85.  
 Schöne, on iron carbide, 19.  
 Sclerometer tests, 15.  
 Scratches during polishing, 65.  
 Segregation, 243.  
 Silver, cast, structure of, 5.  
 and copper, structure of, 22, 25.  
 Slag inclusions, 49.  
 Solid solution, 29.  
 Sorbite, 176.  
 definition of, 306.  
 Sorby, on bas-relief polishing, 110.  
 on pearlite, 17, 171.  
 on structure of cooling steel, 31.  
 on structure akin to martensite, 181.  
 on technique of polishing, 59, 105.  
 Spiegeleisen, cooling curve of, 22.  
 figures, 12.  
 solidification points of, 21.  
 Spring, on "balling" of powders, 90.  
 Stansfield, on curves, 39-42.  
 on overheated steel, 259.  
 on Roozeboom diagram, 275.

- Stead, on blowholes, 253.  
 on diamantine powder, 108.  
 on overheated steel, 145, 262.  
 photo of crystalline iron by, 99.  
 on polishing machine, 127.  
 on slag inclosures, 51.  
 Steadite, definition of, 290.  
 Steel, burnt, overheated and welded, 243, 259.  
 forged, structure of, 13, 14, 263.  
 heat-tinted, 266.  
 heat-treatment of, 142.  
 macrostructure of, 267.  
 micrographic analysis of, 104.  
 mild, structure of, 6, 7.  
 rouges, 107.  
 Steel, primary constituents of, 166.  
 segregation in, 243.  
 systematic examination of, 198.  
 with 0.14 carbon, structure of, 204, 215.  
 0.02 carbon, structure of, 202.  
 0.45 carbon, structure of, 214.  
 1.25 carbon, structure of, 231-234.  
 1.57 carbon, structure of, 237-239.
- Structures, nomenclature of, 287.  
 Sulphur in pig-iron, 157.  
 prints, 157, 267.  
 Baumann's method, 269.  
 Heyn's method, 267.  
 Rogers' method, 271.
- TALBOT, researches by, 253.  
 Temper colours, 11.  
 Theoretical considerations, 274.  
 Thime, on planing, 77.  
 Thurston, on elongations, 39.  
 Tin and copper alloys, equilibrium curves of, 40.  
 Transformation curves of iron, 275.  
 in metals, 20.  
 Tresca, on planing, 76.  
 Troostite, 184.  
 definition of, 304.  
 Troosto-sorbite, 290.  
 Tschernoff, on equilibrium curves, 30.
- VENHAM, on character of scratches, 70.  
 Volatilisation as a critical change, 20.
- WEDDING, on diseases of metals, 49.  
 on heat-tinting, 12.  
 on heat-treatment, 204.  
 Welding of steel, 242.  
 Werlein, on liquorice decoction, 113.  
 Werth, on iron carbide, 19.  
 Weyl method of polishing, 172.  
 Wollaston, on attrition, 70.  
 Wüst, on lederburite, 289.









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