SECTION B — PERFORMING OPERATIONS; TRANSPORTING

B21 MECHANICAL METAL-WORKING WITHOUT ESSENTIALLY REMOVING MATERIAL; PUNCHING METAL

B21F WORKING OR PROCESSING OF WIRE (rolling of metal B21B; by drawing, auxiliary operations used in connection with metal-working without essentially removing material B21C; bundling articles B65B 13/00)

Subclass index

WIRE WORKING CHARACTERISED BY OPERATIONS PERFORMED
- Bending, straightening; coiling; twisting....1/00, 3/00, 7/00
- Upsetting, straining....5/00, 9/00
- Cutting, splitting, connecting....11/00, 13/00, 15/00
- Articles jacketed or reinforced with wire....17/00
- Coating of wire....19/00
- Other treatments....99/00
- Feeding wire into apparatus....23/00

WIRE WORKING CHARACTERISED BY THE PARTICULAR ARTICLES PRODUCED
- Barbed wire;network, fencing, wire fabrics....25/00, 27/00-33/00
- Springs, rings....35/00, 37/00
- other articles....39/00-45/00

Wire working characterised by operations performed

1/00 Bending wire other than coiling; Straightening wire
- 1/02 • Straightening
- 1/04 • Undulating
- 1/06 • Bending wire-eyes

3/00 Coiling wire into particular forms
- 3/02 • helically
- 3/027 • • with extended ends formed in a special shape, e.g. for clothes-pegs
- 3/04 • • externally on a mandrel or the like
- 3/06 • • internally on a hollow form
- 3/08 • to flat spiral
- 3/10 • to spirals other than flat, e.g. conical
- 3/12 • of interconnected helical springs

5/00 Upsetting wire (in the manufacture of nails or pins B21G 3/12)

7/00 Twisting wire; Twisting wire together (for connections of limited size B21F 15/04)

9/00 Straining wire (straining prestressing wires for concrete E04G 21/12; connections or attachments adapted for straining F16G 11/00)
- 9/02 • by tools adapted also for making connections

11/00 Cutting wire (hand-held metal-shearing or metal-cutting devices B23D 29/00; hand cutting tools with two jaws which come into abutting contact B26B 17/00)

13/00 Splitting wire

15/00 Connecting wire to wire or other metallic material or objects; Connecting parts by means of wire (tools for both straining and connecting B21F 9/00; jacketing or reinforcing B21F 17/00; manufacture of wire network B21F 27/00; in making bands B21F 43/00)
- 15/02 • wire with wire
- 15/04 • • without additional connecting elements or material, e.g. by twisting
- 15/06 • • with additional connecting elements or material
- 15/08 • • • making use of soldering or welding
- 15/10 • wire with sheet metal

17/00 Jacketing or reinforcing articles with wire (by winding B65H 54/00, B65H 81/00; by braiding D04C)

19/00 Metallic coating of wire (by extruding B21C 23/24; by soldering or welding, e.g. cladding or plating, B23K; by other non-mechanical means C23; electroplating C25D)

23/00 Feeding wire in wire-working machines or apparatus (applicable also to feeding rods or strips B21D 43/00)

Wire working characterised by the particular articles produced

25/00 Making barbed wire

27/00 Making wire network, i.e. wire nets (meshed-ring network B21F 31/00; in making bands B21F 43/00; using looms D03D)
- 27/02 • without additional connecting elements or material at crossings, e.g. connected by knitting
- 27/04 • • Manufacturing on machines with rotating blades or formers
- 27/06 • • Manufacturing on twister-gear machines

27/08 • with additional connecting elements or material at crossings
27/10 • • with soldered or welded crossings
27/12 • Making special types or portions of network by methods or means specially adapted therefor
27/14 • • Specially bending or deforming free wire ends
27/16 • • for spring mattresses
27/18 • • of meshed work for filters or sieves
27/20 • • of plaster-carrying network
27/22 • • of network for wire-reinforced glass or the like

29/00 Making fencing or like material made partly of wire (B21F 25/00, B21F 27/00 take precedence) **[2]**
29/02 • comprising bars or the like connected by wires

31/00 Making meshed-ring network from wire

33/00 Tools or devices specially designed for handling or processing wire fabrics or the like
33/02 • Mounting of wire network on frames
33/04 • Connecting ends of helical springs for mattresses

35/00 Making springs from wire (by coiling wire B21F 3/00; making resilient rings B21F 37/02)
35/02 • Bending or deforming ends of coil springs to special shape
35/04 • Making flat springs, e.g. sinus springs

37/00 Manufacture of rings from wire (in chain making B21L; producing bead-rings or bead-cores for tyres B29D 30/48)
37/02 • or resilient rings, e.g. key-rings
37/04 • of washers (B21F 37/02 takes precedence)

39/00 Making wheel spokes from wire

41/00 Making umbrella frames or members from wire

43/00 Making bands, e.g. bracelets, or wire (making chains B21L; using looms D03D)

45/00 Wire-working in the manufacture of other particular articles (of pins, needles, nails, hairpins B21G; of chains B21L)
45/02 • of clothes hangers
45/04 • of elements, e.g. levers or links, for bottle stoppers
45/06 • of flexible shafts or hollow conduits, e.g. for Bowden mechanisms
45/08 • of loom heddles
45/10 • of cards for fabric-napping machines
45/12 • of fishing hooks
45/14 • of end-pieces for laces or ropes
45/16 • of devices for fastening or securing purposes
45/18 • • of slide fastener elements
45/20 • • of spring hooks; of spring safety hooks
45/22 • • of paper fasteners or clips (staples B21F 45/24)
45/24 • • of staples; of belt-fastening elements
45/26 • • of buttons
45/28 • • • of "patent-fastener" or press-button type

99/00 Subject matter not provided for in other groups of this subclass [2009.01]