1 **MISCELLANEOUS**
2 R **HOISTING TRUCK**
3 R .Tilting load support
3 B ..Service station type
3 C ..Platform type
4 R .Cable hoist
4 B ..Service station type
4 C ..Platform type
5 R .Inclined plane or wedge
5 B ..Service station type
5 C ..Platform type
6 R .Rack and pinion or segment
6 B ..Service station type
6 C ..Platform type
7 R .Screw
7 B ..Service station type
7 C ..Platform type
8 R .Single throw lever
9 R ..Toggle
9 B ...Service station type
9 C ...Platform type
10 R ..Parallelogram bars
10 B ...Service station type
10 C ...Platform type
8 B ..Service station type
8 C ..Platform type
2 B .Service station type
2 C .Platform type
10.5 **METALLIC SPRING STRETCHER AND/OR COMPRESSOR (E.G., LEAF, HELICAL, OR COIL SPRINGS)**
11 **FLOOR JACK TYPE**
12 .Rack and pinion or segment
13 .Screw
14 .Step-by-step traveling member
15 .Single-throw lever and bar
16 ..Sliding bar
17 .Single throw lever
18 **NAIL EXTRACTOR TYPE**
19 .Hammer and anvil
20 .Screw
21 .Single throw lever
22 ..Lever and pivoted jaw grip
23 ..Multiple jaw grip
24 ...Cam or wedge actuated
25 ..Claw bar
26 R ...Hammer
26 E ....Extensible fulcrum
27 ...Pivoted fulcrum member
28 **STAPLE PULLER**
28.5 **THILL-COUPLING JACK**
29 R **PIPE OR ROD JACK**
30 .Lifter
31 ..Reciprocating clutch
29 A .Tie rod tensioner
32 **AXLE-LUBRICATING JACK**
33 **CAR JOURNAL BOX LIFTING**
34 .Suspended lifter
35 **CAR-PUSHER TYPE**
36 .Pinch bar
37 ..Rail clamping
38 ..Pivoted wheel engaging member
39 **DOOR BRACE**
40 **PRINTER'S QUOINS**
41 .Screw
42 .Wedge
43 **RAIL OR TIE SHAFTER**
44 .Single throw lever
45 **VEHICLE-BODY LIFTERS**
46 .Lever and drum
47 .Cable hoist
48 ..Vehicle attached drum
49 .Swinging side bars
50 ..Single fixed pivot
50.1 **RESILIENT TIRE-CASING SPREADERS**
50.2 .Spreader and tire casing relatively movable or rotatably mounted
50.3 .Fluid pressure operated
50.4 .With tire casing support
134.3 R **METHOD OR APPARATUS FOR PLACEMENT OF CONDUCTIVE WIRE**
134.4 .By fluid pressure differential in conduit (e.g., parachute sucked through conduit)
134.5 .Tractor for pulling wire (e.g., battery-powered)
134.6 ..Step-by-step type (e.g., by camming against messenger)
134.7 .Sectional members for fishing
134.3 PA.Utility pole guide
134.3 CL.Cable lashing
134.3 FT.Conduit snakes
134.3 SC.Submarine cable
199 **PORTABLE IMPLEMENTS OR APPARATUS FOR TENSIONING FLEXIBLE MATERIAL OR FOR EXTRACTING STUMPS OR POLES**
200 .Material comprises resilient floor covering (e.g., carpet)
201 ..Including fluid or spring driven cylinder
202 ..Including force transmitting cable and driven, rotatable, cable engaging drum

203 ..Including driven, rotatable, floor covering engaging and pulling drum
204 ..Including screw drive
205 ..Including rack and pinion, or pinion segment, drive
206 ..Including ratchet bar and driving pawl drive
207 ...Having plural, disparate, driving pawls
208 ..Including rotatable, pulley wheel element and cable
209 ..Including force transmitting, hand held and operated, lever
210 ...With means attached thereto for sequentially, gripping, shifting, and releasing bar component
211 ...With floor covering clamping means attached to lever
212 ...Having linearly shifting, guided component attached thereto
213 .Including rotatably driven drum for engaging either material or force transmitting cable
214 ..Plural drums or drum with plural distinct sections
215 ...Juxtaposed to material or cable at single locus
216 ..Having pressure element spaced therefrom to confine material or cable thereagainst
217 ..Having ratchet wheel and interengaging pawl for driving drum
218 ...Pawl pivots about fixed point on drive handle
219 ..Having intermeshing gears for driving drum
220 ...Worm and worm wheel
221 ..With projections or apertures on drum for engagement with complementary formations on material or cable
222 ..With means for preventing or retarding rotation in at least one direction
223 ...Ratchet wheel or formation and pawl
224 ..With adjustable gripping device for attaching drum to rigid, in situ structure
225 ..With material or cable contacting infeed guide
226 ...Rotatable pulley wheel element
227 ..With ground-engaging support means
228 .Including expansible chamber fluid motor drive
229 .Including worm and worm wheel gear drive
230 .Includng rack and pinion, or pinion segment, drive
231 .Including screw drive
232 ..Plural screws
233 ...Having plural, oppositely shifting, threaded riders
234 ..Having plural, oppositely shifting, threaded riders
235 ..Having ratchet wheel and pawl for driving screw
236 ..Having intermeshing gears for driving screw
237 .Including ratchet bar and driving pawl drive
238 ..Having plural, disparate, driving pawls
239 ...Plural ratchet formations
240 ....Facing opposite directions
241 .Including intermeshing gear drive
242 .Including rotatable, pulley wheel element and cable
243 .Including either force transmitting, hand held and operated lever or animal powered sweep
244 ..Implement or apparatus includes bar component having plural holes and removable cooperating pins selectively engagable by lever
245 ..With means attached thereto for sequentially gripping, shifting, and releasing bar component
246 ..Having linearly shifting, guided component attached thereto
247 ...With ratchet formation and locking pawl for maintaining relative positioning
248 ..With additional, hand held lever pivotally attached thereto for applying pulling force in opposite direction

249 ...Having position locking means between levers
250 ..With camming means thereon, and pressure element spaced therefrom to confine material, or force transmitting cable, thereagainst
251 ..With material, article, or force transmitting cable clamping means attached to and shifting with lever
252 ...Including cooperating, relatively stationary means for intermittently locking material or cable
253 ...Plural clamping means
254 ....Alternately clamping and pulling on material or cable
255 ....Attached by flexible connector
256 ..With material, article, or force transmitting cable engaging means movably attached to and shifting with lever
257 ...Including cooperating, relatively stationary means for intermittently locking material or cable
258 ...Plural, movably attached engaging means
259 ....Alternately engaging and pulling on material or cable
260 ....Attached by flexible connector
261 ..With means pivotally connected to lever and adapted to engage rigid, in situ structure
262 .Including adjustable gripping device for attaching implement or apparatus to rigid, in situ structure
263 .Including ground engaging means for supporting implement or apparatus in plural, vertically spaced positions
84 **TRAVERSING JACK**
85 .Screw
418 **VEHICLE ATTACHED JACK**
419 .Semi-trailer landing gear
420 .Attached to trailer tongue
421 .Turntable
422 .Rocking lever
423 .Hydraulic or pneumatic
424 .Screw actuated
425 ..Gear driven
426 .Cable actuated
427 .Rack and pinion
264 **APPARATUS FOR HAULING OR HOISTING LOAD, INCLUDING DRIVEN DEVICE WHICH CONTACTS AND PULLS ON CABLE**
265 .Device includes driven, flexible, cable contacting belt
266 .Device includes rotatably driven, cable contacting drum
267 ..Having rotational speed governor for generating control impulse to rotation retarding means or drive
268 ..Having mechanism, actuated by changes in position of drum relative to another component of device, for generating control impulse to rotation retarding means or drive
269 ..Having stationary mechanism, actuated by load or other obstruction on and traveling with cable, for generating control impulse to rotation retarding means or drive
270 ..Having cable contacted, supported, or attached mechanism for generating control impulse to retarding means or drive
271 ...With cable contacting component, on or adjacent to circumference of drum, shifted by segment of wound cable
272 ...With cable deflecting or path defining component shifted by cable when tension varies
273 ....Electricity or fluid utilized in transmittal of impulse
274 ..Having mechanism, linked to drum or rotating element of drive, for generating control impulse to rotation retarding means or motor when torque on drum varies
275 ...Electricity utilized in transmittal or impulse
276 ..Having mechanism, linked to drum and actuated by number of drum rotations, for generating control impulse to rotation retarding means or drive

277 ..With fluid or resilient shock absorbing or tension maintaining means attached to, supported by, or supporting guiding structure for cable
278 ..Plural drums or drum with plural distinct sections
279 ...With vehicle for supporting at least one drum
280 ....Having rotatable, cable guiding, pulley wheel element spaced from drums
281 .....Element repositionable relative to at least one of the drums
282 ....Drive for at least one drum includes motor of vehicle
283 ...Having rotatable, cable guiding, pulley wheel element spaced from drums
284 ....Element repositionable relative to at least one of the drums
285 .....Plural elements
286 ....Plural elements
287 ...Juxtaposed to cable at single locus
288 ...With means affixing at least one drum to supporting base and allowing movement between drum and base
289 ....Movement engages or disengages drum from drive
290 ...Plural, distinct, drive motors
291 ....Noncompressible fluid
292 ....Electric
293 ...Each drum having plural, distinct drive sources or discrete drive trains
294 ...Having common drive source or mechanically interlinked drive trains
295 ....Including intermeshing gears in drive
296 .....Worm and worm wheel
297 .....Epicyclic gear train having sun, intermediate (e.g., planet), and ring gears
298 .....Shiftable into and out of intermeshing engagement
299 .....Also including clutch mechanism having coaxial, rotatable, relatively shiftable axially, power transmitting components
300 ......With frictional brake assembly mechanically linked to, and operationally influenced by, clutch
301 ......With additional axially shiftable clutch mechanism mechanically linked to, and operationally influenced by, first clutch
302 ....Alternately transmitting power
303 ......Fluid operated actuator shifts component
304 ......Components having frictional contact surface
305 ....Truncated cone shaped
306 .....Also including ratchet wheel and driving pawl
307 ......Plural driving pawls
308 ....Attached to rotatable disk or shaft
309 .....Also including clutch mechanism having rotatable, radially shiftable, power transmitting component
310 .....With means for preventing or retarding rotation of one or more drums in at least one direction
311 ....Including sprocket wheel and chain in drive
312 ....Including power transmitting pulley and rope or belt either in drive or in cable return means
313 ....Including contacting friction wheels having noncollinear axes of rotation in drive
314 ....Including expansible, noncombustible, fluid motor in drive (e.g., air, steam)
315 ....Including noncompressible fluid motor or pump in drive
316 ....Including electric motor in drive
317 ....Including clutch mechanism in drive having coaxial, rotatable, relatively shiftable axially, power transmitting components
318 .....With frictional brake assembly mechanically linked to, and operationally influenced by, clutch
319 .....Components having frictional contact surface

320 ....Including ratchet wheel and interengaging driving pawl in drive
321 ....Including means for preventing or retarding rotation of one or more drums in at least one direction
322 .....Frictional brake assembly having rotating, wheel structure and shiftable shoe or band
323 ..With vehicle for supporting drum
324 ...Having arch-shaped body for straddling load
325 ...Having rotatable, cable guiding, pulley wheel element spaced from drum
326 ....Element repositionable relative to drum
327 ....Plural elements
328 ...Drive for drum includes motor of vehicle
329 ..With means affixing drum to supporting base and allowing relative movement therebetween
330 ...Movement engages or disengages drum from drive
331 ...Movement occurs along line collinear with rotational axis of drum during pulling of cable
332 ...Including pivotal, rotational, or swivel connection between drum and base
333 ..Having pressure element spaced from drum to confine cable thereagainst
334 ..Having rotatable, cable guiding, pulley wheel element spaced from drum
335 ...Element repositionable relative to drum
336 ....Plural elements
337 .....Cable supported
338 ...Plural elements
339 ..Having plural, distinct drive sources or discrete drive trains
340 ...Including two or more motors
341 ..Drive includes rack and either pinion or pinion segment
342 ..Drive includes intermeshing gears
343 ...Worm and worm wheel
344 ...Epicyclic gear arrangement including sun, intermediate (e.g., planet), and ring gears
345 ...Shiftable into and out of intermeshing engagement
346 ...Drive also includes clutch mechanism having coaxial, rotatable relatively shiftable axially, power transmitting components
347 ....With frictional brake assembly mechanically linked to, and operationally influenced by, clutch
348 ....With additional axially shiftable clutch mechanism mechanically linked to, and operationally influenced by, first clutch
349 ....Fluid operated actuator shifts component
350 ....Components having frictional contact surface
351 .....Truncated cone shaped
352 ...Drive also includes ratchet wheel and driving pawl
353 ....Plural driving pawls
354 .....Attached to rotatable disk or shaft
355 ...Drive also includes clutch mechanism having rotatable, radially shiftable, power transmitting component
356 ...With means for preventing or retarding rotation of drum in at least one direction
357 ....Ratchet wheel or formation and locking pawl
358 ..Drive includes sprocket wheel and chain
359 ..Either drive or cable return means includes power transmitting pulley and rope or belt
360 ..Drive includes expansible, noncombustible, fluid motor (e.g., air, steam)
361 ..Drive includes noncompressible fluid motor or pump
362 ..Drive includes electric motor
363 ..Drive includes contacting friction wheels having noncollinear axes of rotation
364 ..Either drive or cable return means includes spring

365 ..Drive includes clutch mechanism having coaxial, rotatable, relatively shiftable axially, power transmitting components
366 ...With frictional brake assembly mechanically linked to, and operationally influenced by, clutch
367 ...Fluid operated actuator shifts component
368 ...Components having frictional contact surface
369 ..Drive includes ratchet wheel and interengaging driving pawl
370 ..Drive includes clutch mechanism having rotatable, radially shiftable, power transmitting component
371 ..With means on circumference of drum, or relatively movable drum components, for grasping cable
372 ..With projections or apertures on drum for engagement with complementary structural formations on cable
373 ..With pickup or pushing means on circumference of drum for cooperating with structure attached to, or formed on, end of cable
374 ..Having noncircular or varying diameter, cable contacting perimeter
375 ..Including means for preventing or retarding rotation of drum in at least one direction
376 ...Ratchet wheel or formation and locking pawl
377 ...Fluid resistance brake
378 ...Frictional brake assembly having rotating, wheel structure and shiftable shoe or band
379 ....Having fluid actuator for shifting shoe or band
380 ..With portable housing for drum and hand manipulated means for removably fastening housing to supporting base or load
381 ..With structure (e.g., sweep, tree, yoke) adapting drum to be powered by draft animal
382 ..Including static receiver spaced from drum for storing pulled cable
383 ..With cable guard structure extending partly around and closely adjacent to drum
384 .Including hand held and operated lever with plural cable engaging means movably attached thereto for alternately contacting and pulling on cable
385 .With rotatable, cable contacting, pulley wheel element attached to and reciprocated by driving component of device
386 ..Element reciprocated by expansible fluid motor
88 **INCLINED PLANE LIFTER**
89 R **MULTIPLE LIFTERS (E.G., VEHICLE LIFTS)**
90 .Track-straddling platform
91 .Swinging platform
92 .Screw
89 H .Fluid pressure
93 R **FLUID PRESSURE**
93 VA .Vehicle attached
93 L .Service station lifts
93 A .Combined with screw
93 HP .Inflatable portable bags
93 H .Portable automobile jacks
94 **ROCKING SUPPORTS**
95 **RACK AND PINION**
96 .Screw pinion
97 .Geared
98 **SCREW**
99 .Derrick type
100 .Special engaging feature
101 ..Rocking head or base
102 .Telescoping screws
103 .Geared
104 **WEDGE**
105 **STEP-BY-STEP TRAVELING BAR**
106 .Clutch actuated
107 ..Multiple driving clutches
108 .Pawl actuated
109 ..Multiple driving pawls
110 ...Reversing
111 ..Reversing
112 .Rack and lever
113 **SINGLE THROW LEVER AND BAR**
114 .Sliding bar
115 ..Rack bar and segment
116 ..Adjustable
117 ...Lateral shoe
118 ...Rack bar
119 .Adjustable

120 **SINGLE THROW LEVER**
121 .Rail or tie lifter
122 .Lazy tongs
123 .Lever-supported thrust bar
124 .Mechanically actuated
126 ..Screw
127 ..Cable
128 ...Block and tackle
129 .Adjustable
130 ..Multiple fulcrums
131 .Special engaging feature
131.5 ..Fulcrumed fork or shovel
132 ..Root puller type
387 **LOAD ENGAGING MEMBER AND POWER TRANSMITTING CABLE FOR SHIFTING MEMBER RELATIVE TO STRUCTURE WHICH CONTACTS AND GUIDES MEMBER**
133 R **SPECIAL ENGAGING ELEMENTS**
134 .Adjustable
133 A .Sharing props (nonhydraulic)
388 **MEANS SUPPORTED BY, AND MAINTAINING RELATIVE SPACING BETWEEN, LONGITUDINAL RUNS OF AN ENDLESS LOAD MOVING CABLE**
389 **DEVICE OR MEMBER FOR CONTACTING AND GUIDING MOVING CABLE**
390 .Including rotatable, cable contacting, pulley wheel element
391 ..With mechanism for retarding or preventing cable movement or element rotation
392 ..With fluid, shock absorbing or tension restoring mechanism connected thereto
393 ..Plural elements or element with plural cable contacting regions
394 ...At least two of the elements having noncollinear axes of rotation
395 ....Juxtaposed to cable at single locus
396 .....Having juxtaposed elements repositionable relative to one another
397 .....Including additional element spaced along cable path
398 ....Having one element repositionable relative to another element
399 .....Repositionable element supported by cable (e.g., traveling block)
400 ....Having axes perpendicular or skewed
401 ...With portable block for elements and hand manipulated means for removably fastening block to support base or load
402 ....Having portion of block repositionable for insertion or removal of cable or for exposure of elements
403 ....With guard or guide for maintaining cable on elements
404 ....Including antifriction means for elements
405 ..With block for element and portion thereof repositionable for insertion or removal of cable or for exposure of element
406 ...Portion revolves about axis of rotation of element
407 ..With means, or element structure, enabling object or obstruction on cable to bypass or travel over element
408 ..With block for element having stationary portion adapted to coact with element to grip cable
409 ..With portable block for element and hand manipulated means for removably fastening block to support or load
410 ...Fastening means remotely operable or breakaway type
411 ...With guard or guide for maintaining cable on element
412 ...Including antifriction means for element
413 ..With means for affixing element to support base and allowing relative movement therebetween
414 ...Including elastic member
415 ...Including pivotal, rotational, or swivel connection
416 ..With antifriction means for element
417 .Having cable contacting portion revolving around another component of device

CROSS-REFERENCE ART COLLECTIONS

900 **CABLE PULLING DRUM HAVING WAVE MOTION RESPONSIVE ACTUATOR FOR OPERATING DRIVE OR ROTATION RETARDING MEANS**
901 **ANTIFRICTION MEANS FOR CABLE PULLING DRUM**
902 **EITHER DRUM, PULLEY WHEEL ELEMENT, OR CABLE CONSTRUCTED FROM SPECIFIC MATERIAL**
903 **YIELDABLE, CONSTANT ENGAGEMENT, FRICTION COUPLING (E.G., SLIP CLUTCH) IN DRIVE FOR CABLE PULLING DRUM**

FOREIGN ART COLLECTIONS

FOR 000 **CLASS-RELATED FOREIGN DOCUMENTS**

DIGESTS

DIG 1 **JACK BASES**
DIG 2 **ELECTRIC SCREW JACKS**
DIG 3 **JACK HANDLES**
DIG 4 **OBJECT ENGAGING HEADS FOR JACKS**
DIG 5 **MEANS FOR DEPRESSING FOOT BRAKE WHEN ADJUSTING SAME**
DIG 6 **FLEXIBLE RACK AND PINION**
DIG 7 **PRINTERS FORM TRUCKS**
DIG 8 **SCREW JACKS, PLURAL SECTION NUT**
DIG 9 **VEHICLE-OPERATED LIFT PLATFORM**
DIG 10 **TIRE OR RIM EXPANDING OR CONTRACTING DEVICES**
DIG 11 **CABLE DRUM FEED FOR PRESSER**
DIG 12 **PAWLS**
DIG 13 **VEHICLE RETARDING DRUMS**
DIG 14 **ROPE ATTACHMENT**
DIG 15 **MOTOR CLAMPS**
DIG 16 **AUTOMOBILE TRANSMISSION JACK**