CLASS 144 WOODWORKING

144 - 1

329	PROCESS	369	Including slicing, slitting,
330	.Repairing or reconstructing		chipping, or planing
331	Bowling pin	370	Chipping
332	Plywood, veneer, or board	371	Routing or grooving
333	.Rattan or bamboo working	372	Using template or pattern
334	.Stump removing	373	Chipping or planing
335	.Timber harvesting or processing	374	Using ganged cutting discs
336	Tree felling	375	Using cylindrical tool
337	And chipping	376	Longitudinal sawing
338	And delimbing and cutting	377	Longitudinally tapered work
000	trunk to length		or product
339	By shearing	378	Log or cant sawing
340	Debarking	379	Transverse sawing
341	Mechanically (e.g., by	380	Including heating, cooling, or
511	engaging a friction,		fluid applying
	impacting, cutting member)	381	Bending
342	With pretreating	382	WITH USE OF CONTROL MEANS
343	With preciedency		ENERGIZED IN RESPONSE TO
344	.Securing		ACTIVATOR STIMULATED BY
345	And cutting or shaping		CONDITION SENSOR
346	Surface bonding	383	.Including use of sensor
340	-		responsive to information
547	Of interengaging work parts		carried by removable auxiliary
348	(e.g., dovetail)		record (e.g., recording disk,
	Including heat applying		tape, or card)
349	With bending concurrent or	384	Including plural sensors or
250	subsequent to bonding		sensor responsive to
350	Cutting or shaping subsequent		comparison between plural
2 - 1	to bonding		conditions
351	Followed by additional	385	Utilizing "memory" to store
250	bonding		information on tool or tool-
352	Including pressure applying		linked part
353	By separate mechanical	386	Sensing "pattern"
254	fastener	387	Sensing work or product (e.g.,
354	Interengaging work parts		by X-ray)
355	Shaping by cutting	388	Sensing lead end or tail end
356	.Including monitoring of	389	Sensing cross sectional
	operation		dimension
357	By means which determines	391	.Including plural sensors or
	dimension of work		sensor responsive to
358	.Embossing or imprinting		comparison between plural
359	.Mechanical cutting or shaping		conditions
360	Combined cutting and shaping	392	Sensing work or product (e.g.,
361	Fiber working or reorienting		by X-ray)
362	Roller movement parallel to	393	Sensing performance of work or
	grain		product
363	Cutting	394	Work and product
364	Including heating, cooling, or	395	Sensing temperature
	fluid applying	396	Sensing slack or tension
365	Turning, boring, or drilling		(e.g., by use of dancer)
366	Including splitting	397	Sensing lead end or tail end
367	Plural discrete diverse	398	Sensing cross sectional
	cutting operations		dimension
368	Including grooving	399	Sensing thickness
		-	

144 - 2 CLASS 144 WOODWORKING

400	Sensing tool or tool-linked
	part
401	Sensing tool or tool-linked part
402	<pre>.Sensing work or product (e.g., by X-ray)</pre>
403	Including plural sensors or
403	
	sensor responsive to plural
404	conditions
404	Work and product
405	Sensing temperature
406	Sensing slack or tension
	(e.g., by use of dancer)
407	Sensing lead end or tail end
408	Sensing cross sectional
	dimension
409	Sensing flatness (e.g.,
	crown)
410	Sensing thickness
411	Sensing tool or tool-linked
	part
412	Sensing temperature
413	Sensing slack or tension (e.g.,
ŦŦĴ	by use of dancer)
414	
	Sensing lead end or tail end
415	Including sensor responsive to
	infeeder or outpuller
416	Sensing cross sectional
	dimension
417	To control operation of
	deformer directly by sensor
418	.Including use of sensor
	responsive to energy input to
	tool or tool driver
419	Sensing pressure of tool
	actuating fluid
420	.Sensing tool or tool-linked part
421	To control predetermined
	sequence of operating
	movements (e.g., of one tool
	operating on work)
422	Of different operating
	assemblages
423	Including plural sensors or
125	sensor responsive to plural
	conditions
424	Including work handling or
121	product handling
425	
720	Including plural sensors or
	sensor responsive to plural conditions
426	
1 20	To control operation of
407	interlock
427	To stop machine

428	Sensing force on tool
429	By sensing hydraulic pressure
430	.To control different operating
	assemblages
50	MATCH MAKER
51	.Wax or paper
52	.Cutting, framing, and dipping
53	Die punch
54	.Cutting and framing
55	
	Die punch
56	Fixed die punch
57	.Cutting and coiling
58	.Framing and dipping
59	.Coiling
60	.Dipping
61	.Box filling
65	.Dipping frame
62	Emptying
63	Filling
64	Hopper feed
66	.Splint feed mechanism
207	OSIER PEELER
208.1	BARK ROSSER
	.Tree climber
208.3	.Hydraulically driven cutter or
	hydraulic jet
208.4	.Including means to
	simultaneously rotate and
	advance log
208.5	.Including means to sequentially
	advance work
208.6	.Nontraveling work
208.7	.Tethered percussive tool (e.g.,
	chain, cable, flail, hammer)
208.8	.Hollow head cutter
208.9	.Drum or tank
208.91	.Disk knife
	.Hand tool
2.1	SPECIAL-WORK MACHINE
3.1	.Combined
10	Conveyor flight making
5	Blind or sash cutting
6	Relishing
19	Window-stile-pocket cutting
6.5	
7	Box making
	Box blank making
8	Chair-round trimming and
•	tenoning
9	Clothespin making
11	Handle making
12	Pin making
13	Shingle making
14	Spool making

15	Wheel spoke tenoning and hub or	24.05	.Block surfacing
	felly boring	24.06	.Stopper making
16	Wheel hub making	24.07	.Bobbin making
18	Wheel-spoke trimming and	24.08	.Bowling pin making
	tenoning	24.09	.Bowling ball making
3.5	Wheel facing or hub boring	24.1	.Log punching
4	Circular section	24.11	And expanding
4.1	Timber cutting and handling	24.12	.Stump removing
4.2	Assembly-line type	24.13	.Tree delimbing
4.3	Pivoted traveling	24.14	.Lumber deknotting
4.4	Tie gaining and boring	24.15	.Ring jointing
4.5	Carried by tract car	24.16	.Patch cutting
4.6	Splitting	24.17	.Using rattan
4.7	Assembling connector to wood	24.18	.Ladder making
	strip for subsequent assembly	24.19	.Rack or grid making
	with another wood strip	24.2	.Staglike handle making
4.8	Printing or marking	24.21	.Oil cake trimming
4.9	Slabbing-off, log squaring	24.22	.Wood shoe or wood shoe last
26	.Comb-teeth cutting		making
25	.Box hooping	24.23	.Garment hanger making
27	.Hinge-seat cutting	24.24	.Golf club making
29	.Piano-hammer felting	24.25	.Lifter
28	.Pencil-wood making	1.1	COMBINED MACHINE
28.1	.Pencil sharpening	35.1	.Boring and sawing
28.11	Hand-manipulable	35.2	Attachment for converting one
28.2	Including elongated work holder		tool to other
	or guide for edge-beveling	36	.Planing and matching
28.3	Movable tool	37	Planing, matching, and dividing
28.4	Work actuated tool drive	38	.Planing and polishing
28.5	Work controlled switch for	42	.Slicing and scoring
	tool drive	39	.Planing and sawing
28.6	Rotatable or revolvable	40	.Riving and shaving
28.7	Planetary	41	.Shaping and dividing
28.71	Plural tools	43	.Slicing and shaving
28.72	Including orbital or electric	44	Converging knives
	motor drive	46	.Turning and boring
28.8	Work holder or guide also	47	.Turning and polishing
	rotary	48	.Turning and sawing
28.9	Rotary work holder or guide	48.1	.Turret tools
30	.Pin pointing	48.2	.Coaxial tools, different work
33	.Tray making		levels
34.1	.Tree felling	48.3	.Tippable frame
34.2	Tree puller or pusher	48.4	.Combined band-saw
34.3	Antisplit clamp	48.5	.Hand-held
34.4	Burning or charring means	48.6	Attachments to hand-held
34.5	Shear	48.7	.Different motor positions
34.6	Single blade and pass means	85	DOVETAILING MACHINE
20	.Disk cutting and boring	86	.Consecutive cutters
21	.Disk cutting	87	.Frusto-conical bit
23	By rotary tubular cutter	88	.Inclined chisel
24	By sweep cutter	89	.Inclined rotary disk
24.02	.Core or panel machine	90.1	MATCHING MACHINE
24.03	.Box making	91	.End
24.04	Box hinging	91.2	.Matching cutter

72	MORTISING MACHINE HAVING CHAIN-
	TYPE CUTTER
73	.Portable
82	MORTISING MACHINE HAVING ROTARY
	CUTTER
69	.Auger cutter
70	Portable
71	Automatic step feed
74	.Boring cutter and mortising
	chisel cutter
83	.Portable
75	MORTISING MACHINE HAVING CHISEL
67	.Multiple chisel
68	Portable
77	.Chisel reverser
78	.Hollow chisel and bit
79	Portable
80	.Oscillating chisel
81	Portable
76	.Portable
84	WORK SUPPORT FOR MORTISING
01	MACHINE
92	BORING MACHINE
93.1	.Special work
93.2	Last
96	
97	.Wheel hub
98	Axially using stationary
20	bitstock
99	Axially using stationary
	workholder
100	Inclined bitstock
103	.Swinging
104	.Hand held portable
106	Angularly adjustable
108	.Hand-operated step feed of long
200	work
114.1	PLANER
115	.Scraper
124	.Laterally beveling
125	.Longitudinally beveling,
	inclined work pocket
126	.Longitudinally beveling,
	shifting cutter
127.1	.Longitudinally beveling,
	shifting work support
127.2	Shingle planer
117.1	.Rotary cylindrical cutter
116	Double surfacer
131	Bearings
117.2	Inclined
117.3	Edge trimmer
117.4	Traveling
118	.Rotary disk cutter

119.1 119.2	Traveling Bowling alley
121	.Reciprocating cutter
122	Laterally reciprocating
123	.Endless cutter carrier
120	.Stationary cutter
132	Bit adjustment
128	.Endless work carrier
129	.Adjustable work carrier
130	.Adjustable cutter
130.2	.Planer sharpener
133.1	GAINING MACHINE
133.2	.Tie gaining, ties (skepers) pass
	through machine
133.3	.Traveling on railway track
134.1	SHAPING MACHINE
134.2	.Wooden shoe or wood shoe last
101.1	making
134.3	.Heel forming
135	.Box trimming
135.2	.Vertical spindle
135.3	.Overhanging cutter
135.4	Overhanging, horizontal
133.4	swinging cutter
136.1	
136.2	.Grooving machine
	Grooving gun-stock
136.3	Grooving battery spacer
136.4	Grooving umbrella stick
136.5	Grooving core box
136.6	Grooving stairway stringer
136.7	Grooving log
136.8	Forming hand hold
136.9	Forming corner groove
136.95	Hand tool means
137	.Pattern
138	Polygonal form, indexed work
139	Rotating table, shifting cutter
140	Gear-guided cutter
141	Crank-guided cutter
142	Cutter guiding cam
143	Work guiding cam
144.1	Cutter guiding templet
144.2	Shaping stringed musical instrument
144.3	Shaping propeller
144.4	Shaping oar
144.41	Horizontally swingable tool
	support
144.51	Templet, per se
144.52	Guide track
145.1	Work guiding templet
145.2	Vertical spindle cutter
145.3	Vertical spindle,
	antifriction collar

1 4 5 4	
145.4	Shaping last
146	.Oscillating knife
147	.Reciprocating knife
148	.Plural reversible cutters
149	.Pattern knife, swinging frame
150	.Rotary disk cutter, end thrust
151	.Universally jointed cutter shaft
152	Shaping of curved-work guide
153	.Curved-bar work support
154	.Rotary work carrier
154.5	.Hand tool
155	FIXED KNIFE SHAVER
156	.Circular knife block rattan
	shaver
157	.Drum feed
158	.Roller feed
159	KNIFE PAIR SHAVER
160	.Gripper
161	.Roller feed
162.1	SLICER
163	.Reslicer
164	.Strip cutting by converging
	knives
165	Lathe feed
166	.Strip cutting by lathe feed
167	.Arc cut
168	.Beveling machine having means
100	for alternate end feed
160	
169	.Beveling machine having
	shifting, knife guide
170	.Beveling machine having tilting
	gauge
171	.Beveling machine having tilting
	table
172	.Cylindrical cutter
173	Grooving
174	With radial knife
175	.Fixed knife
176	.Rotary disk
177	-
	.Oscillating log stay
178	.Reciprocating log stay
179	.Screw fed log stay
180	.Hopper feed
181	.Roller feed
181.2	.Bottom cutting
181.3	.Tapered product
182	RIVING MACHINE
183	.Beveling machine
184	.Fixed knife
185	SLIVERING MACHINE
186	.Scoring plane
187	On endless belt
188	
	Rotary
189	.Gang saw

190	.Plunger and fixed knife
191	.Receiving and handling device
192	SPLITTING AND BUNDLING MACHINE
193.1	SPLITTING MACHINE
193.2	.Tapered or wedge shaped product
194	.Self-feeding
195	Roller or belt
195.2	.Drop type
195.3	.Splitting gun
195.4	.Hand-operated fixed splitting
	machine
195.5	.Hand tool
195.6	.With adjustable work support
195.8	.Wedge
195.1	To be driven by fluid pressure
195.7	To be driven by impacting
20017	member
195.9	.Anvil, chopping or splitting
27017	block
196	PUNCHING CUTTER
197	.Fixed die
205	TENON TURNING MACHINE
206	.Wheel spoke
198.1	TENONING MACHINE
199	.Blind slat
200	Machine having rotary cutter
200	Rotary gaining cutter
202	.Chisel pair
202	.Rotary gaining cutter
204	Multiple tenon
201	.Attachment to a table saw
209.1	VENEER LATHE
210	.Convertible
210	.Inclined knife
212	.Knife or knife block
212	.Presser bar or roll
214	.Log stay
215	.Strip-cutting attachment
215.2	.Log loading or centering
215.3	.Eccentric curved cut
215.4	.Diagonal cut by curved cutting
213.1	edge
216	MITER CUTTER
217	.Angle knife
218	ROTARY CUTTER
219	.End thrust
220	.Frusto-conical
221	.Cylindrical cutter having spiral
	bit
230	.Having slotted bit seat
222	.Double saw having intermediate
~~~	cutter
238	.Wobble saw
230	.WODDIE Saw .Distorted saw
	. DIDCUICCU DUW

223	.Single saw with side cutter
224	.Polygonal rotary cutter having
	T-slot bit clamp
225	.Polygonal rotary cutter having
	plane bit seat
226	.Polygonal rotary cutter having
	convex bit seat
227	.Polygonal rotary cutter having
	concave bit seat
228	.Plane bit seat in radial arm of
220	cutter
229	.Slotted bit seat in radial arm
	of cutter
231	.Disk cutter including multiple
231	clamping disks, tangential bit
232	.Disk cutter including multiple
232	clamping disks, pivoted bit
233	.Disk cutter including multiple
233	clamping disks, shank bit
234	
234	.Disk cutter including eccentric
235	segmental bit .Disk cutter including side
233	attached, edge cutting bit
236	
230	.Arranged in a pattern .Gang of disk cutters
	-
240	.Solid
241	Bit
49	MISCELLANEOUS SINGLE-OPERATION
251.1	CUTTER GUARD
251.2	.Vertical spindle
251.3	.Laterally urged
252.1	CUTTER HOOD OR DUST CONVEYOR
252.2	.With sifter, sorter, or
	separator
242.1	FEEDER OR PRESSER
243	.Presser bar or chip breaker
244	Sectional
245.1	.Blank feeder
245.5	Stacker or unstacker
245.7	Feed from top of stack
245.6	Pusher having retractable dog
245.2	Endless
245.3	With work clamp
245.4	Intermittent feed chain drive
246.1	.Feed roll
246.2	With feeler or presensing
	device
247	Spring pressed
248	Weighted
248.2	With oblique means urging work
	laterally
248.3	Resilient feed roll
248.4	On overhanging arm
248.5	Work centering and feeding

248.7 250.1	
	Nonfeeding presser
	Presser roll
	Urged by variable fluid
200.11	pressure
250.15	
250.16	Roll
250.17	Chain
250.18	Foot
250.19	Four motion foot
250.2	Laterally acting
250.21	.With reverse feeder
250.22	Reverse feed starter
250.23	.L-feed
250.24	.Turnover
250.25	.Lifter
	.Fluid pressure driven
	WORK GUIDE
	.Vertical spindle
253.3	.Roll or collar coaxial with
	cutter
253.4	.Work held by corner or diagonal work
253.5	.Simultaneous adjustments along
	length
253.6	.Work urged laterally
253.7	Centering
253.8	Adjustable inclined work-
	engaging face
	Side or edge evener
	.Knife edge
	WOOD BENDING PRESS
	.With dryer
	.Including bending roller
256.2	
256.3	.Having opposed contoured rigid
256 4	platens
256.4	Three contoured rigid platens
258	.With hoop gauge FIXED WOOD BENDING FORM
259 260	
260	.Collapsible form .End thrust
262	.With sweep arm and roller
262	.And cooperating strap
263	Strap moved by windlass
264	Strap moved by windrass
265	Strap moved by screw
267	PIVOTAL WOOD BENDING FORM
268	.Coiling
269	WOOD BENDING CLAMP
270	WOOD BENDING, BENDER

<ul> <li>278.1 MACHINE WORK CLAMP</li> <li>278.2 .Last or heel</li> <li>278.3 .Vacuum operated</li> <li>284 CORK (OR BUNG) PRESS</li> <li>285 COMBINED WORKBENCH AND TOOL CHEST</li> </ul>
278.3.Vacuum operated284CORK (OR BUNG) PRESS
284 CORK (OR BUNG) PRESS
285 COMBINED WORKBENCH AND TOOL CHEST
286.1 <b>WORKBENCH</b>
286.5 .Of special shape or structure
287 .Having adjustable stock rest
288.5 LATH HOLDER
306 BENCH DOG
307 .Clamping
308 .Removable

## FOREIGN ART COLLECTIONS

FOR CLASS-RELATED FOREIGN DOCUMENTS

## 144 - 8 CLASS 144 WOODWORKING