

U. S. DEPARTMENT OF COMMERCE
NATIONAL BUREAU OF STANDARDS
WASHINGTON

(June 4, 1941)

Letter
Circular
LC-651
(Supersedes
LC-504)

VARIETY REDUCTION EFFECTED BY THE APPLICATION OF SIMPLIFIED PRACTICE

Today, priorities are being invoked to conserve the supply of scarce materials and to relieve and forstall bottlenecks which would otherwise seriously jeopardize the whole National Defense Program. This does not necessarily mean that non-defense industries must be deprived entirely of the raw materials they need, but it, obviously, does mean that those industries will have to go on rations.

The rationed materials will have to be used wisely, in accordance with an efficient plan. It cannot be claimed either wise or efficient to fabricate any part of our scarce materials into varieties of products that are seldom demanded and which complicate the processes of manufacturing, swell inventories, and, worst of all, reduce the effective supply of materials. A prime purpose of simplification is to prevent these things.

If manufacturers, distributors, and consumers will work together, voluntarily, on simplification, the sense of deprivation can be lessened, even in the face of rationing, and the National Defense Program will be facilitated.

To illustrate achievements in the reduction of unnecessary variety, and, by example, to show the broad applicability of the procedure which has made them possible, there is presented herein for a selected list of commodities a comparison of the number of varieties produced under simplified practice with the number produced before simplified practice was applied.

Simplified practice means reduction of excessive variety of manufactured products, or of methods. Simplified Practice Recommendations are records of stock items retained after superfluous varieties have been eliminated. These recommendations are developed by voluntary cooperation among manufacturers, distributors, consumers, and other interests, through a regular procedure of the National Bureau of Standards established for that purpose; a procedure designed to insure not only the initial success of a program.

but also its regular review, thereafter, and revision whenever, and as often as necessary, to meet changing industrial and economic conditions.^{1/}

The following brief notes suggest some of the more obvious advantages to be gained from a simplified practice program by the various participants.

TO THE MANUFACTURER: Less capital tied up in slow-moving stocks; simplified inspection requirements; longer factory-runs with fewer changes; less idle equipment; less stock to handle; larger production-units; less special machinery; more prompt delivery; less chance of error in shipment; and less obsolescence in material and equipment.

TO THE JOBBER, WHOLESALER, AND RETAILER: Increased turnover; elimination of slow-moving stock; staple lines - easy to buy, and quick to sell; greater concentration of sales efforts on fewer items; decreased capital invested in new stocks and repair parts; less storage space required; and decreased overhead and handling charges.

TO THE CONSUMER: Better values than otherwise possible; better service in delivery and repairs; and better quality of products.

Simplification may be applied quickly, as an emergency measure, to insure the smooth operation of priorities, rationing, conservation of materials, control of inventories, etc. Furthermore, when the present emergency is over, the established Simplified Practice Recommendations will tend to prevent a recurrence of the unnecessary multiplication of variety which occurred in the last post-war period, in some fields.

^{1/} For further information regarding the complete list of effective Simplified Practice Recommendations, and a description of the procedure used in their development, write to the Division of Simplified Practice, National Bureau of Standards, Washington, D.C. In your request, please mention this Letter Circular.

VARIETY REDUCTION EFFECTIVE BY THE APPLICATION
OF SIMPLIFIED PRACTICE

ITEM	Varieties			S.P.R. No.
	Before simplifi- cation	After simplifi- cation	% re- duc- tion	
Abrasive products, coated	8,000	1,755	78	89-40
Asphalt.....	102	11	89	4-36
Axes, forged.....	845	384	54	158-37
Bags, glassine.....sizes..	124	26	79	107-31
Bags, paper, grocers'.....	61	47	23	42
Bags, paper, notion and millinery...sizes..	188	22	88	129-41
Barrels, steel; and drums.....capacities..	66	26	61	20-28
Bars, steel, reinforcing.....	32	11	66	26-30
Bars, steel, spiral, reinforcing...sizes..	7	4	43	53-32
	(lengths..	33	1	97)
Beds, hospital.....(widths..	34	1	97)	24-37
	(heights...)	44	1	98)
	(colors..	3	2	33)
Blackboard, composition (widths..	18	3	83)	75-29
	(lengths..	90	5	94)
Blankets.....	78	11	86	11-36
Board, binders.....	718	10	99	81-28
Board, box, thicknesses of.....	244	96	61	44-36
Boilers, range; and expansion tanks.....	130	13	90	8-29
Boilers, steel, horizontal firebox heating.	2,328	38	98	157-37
Bolts, machine,carriage and lag (steel)....				
(stock production sizes)..	896	584	31	169-37
Bolts, plow.....	1,500	840	44	23
Books, composition..Counts (No. of leaves).	76	41	46	84-28
Bottles, carbonated beverage:				
(shapes....	15	12	20)	
Soda and imported (capacities....	15	12	20)	
ginger ale.....(heights....	78	6	92)	
(wt. of glass....	16	8	50)	
Water and water shape (capacities....	11	3	73)	123-30
ginger ale.....(heights....	13	3	77)	
(wt. of glass....	18	4	78)	
Beers, export, select (capacities....	8	3	62)	
or C.S.....(heights....	18	2	89)	
(wt. of glass....	18	2	89)	
Bottles, milk and cream, and bottle caps...	49	4	92	10
Boxes, corrugated and solid fiber,				
for canned fruits and vegetables.....	150	26	83	146-38

(Please turn to page 2)

VARIETY REDUCTION EFFECTED BY THE APPLICATION OF SIMPLIFIED PRACTICE (Cont'd.)

Item	Varieties			S.P.R. No.
	Before simplification	After simplification	% reduction	
Boxes, corrugated, for department and specialty store use.....sizes..	322	61	81	128-41
Boxes, folding, for department and specialty store use.....sizes..	262	23	88	127-41
Boxes, folding, one-pound for coffee.....	100	2	98	64-30
Boxes, set-up.....sizes..	1,084	75	93	126-41
Brick, common; and rough and smooth face brick.....	75	2	97	7
Brick, paving, vitrified.....	66	5	92	1-40
Brick, sand-lime.....	45	1	98	38-37
Brushes, calcimine, block (widths.. sizes for.....(thicknesses:..	47 34	10 8	79) 76)	121-31
Brushes, paint and varnish.....	480	143	70	43-28
Cans, fruit and vegetable (names, dimensions, capacities, and designated use).....	200	39	80	155-40
Cans, tinned, steel, ice cream.....types and sizes..	14	5	64	164-36
Caps, bottle, milk and cream; and milk and cream bottles.....	49	4	92	10
Cartons, ice cream; and ice cream brick molds.....mold sizes..	30	1	97	120-40
Cartridges, metallic.....	348	150	57	62-39
Chain, welded.....	1,831	1,214	34	100-29
Checks, guest, restaurant:				
(grades...)	4	3	25)	
Cardboard checks.....(widths...)	12	5	58)	
(lengths...)	16	14	12)	113-30
Paper checks.....(grades...)	7	4	43)	
(widths...)	10	8	20)	
Chinaware, cafeteria and restaurant.....	700	309	56	33
Chinaware, dining car.....	700	345	51	39
Chinaware, hospital.....	700	345	51	40
Chinaware, hotel.....	700	253	63	5
Cloth, screen, wire insect.....	360	154	57	122-31
Containers (cans), fruit and vegetable, (names, dimensions, capacities, and designated use).....	200	39	80	155-40
Containers (cans), tinned, steel, ice cream.....types and sizes..	14	5	64	164-36
Containers, extracted honey.....sizes..	65	10	85	156-37
Containers, glass; for cottage cheese and sour cream.....sizes..	20	3	85	148-33

(Please turn to page 3)

VARIETY REDUCTION EFFECTED BY THE APPLICATION OF SIMPLIFIED PRACTICE (Cont'd.)

Item	Varieties			S. P. R. No.
	Before simplification	After simplification	% reduction	
Containers, glass, for mayonnaise and kindred productscapacities..	25	5	80	131-35
Containers, glass, for (preserve jars..	40	9	77)	
preserves, jellies, (jelly glasses..	25	7	72)	91-32
and apple butter(apple butter jars..	6	4	33)	
(cups..	16	5	69)	
Cups, ice cream; and cup caps(caps..	15	6	60)	132-36
Drums, steel; and barrelscapacities..	66	26	61	20-28
Duck, cotton	460	94	80	27-36
Fencing, woven-wire; and woven-(styles..	552	71	87)	
wire fence packages(pkg. sizes..	2,072	200	90)	9-28
Files and rasps	661	377	43	6-40
Fittings, eaves trough, conductor pipe, and ridge rolls varieties..	110	79	28	29-39
Fittings, wrought iron and wrought steel, and pipe and valvespipe sizes..	62	48	24	57-32
Flashlight cases, metal and fiber	25	7	72	68-33
Fungicides and insecticides (package sizes)	38	25	34	41-40
Galvanized-ware, tinware and Japanned ware..	1,154	873	24	55
Gauze, surgical	70	29	59	86-37
(qualities..	16	5	69)	
Goring, shoe, elastic(widths.....	13	9	31)	112-29
Hammers, forged	386	180	53	159-37
Hatchets, forged	242	118	51	160-37
Insecticides and fungicides (package sizes)	38	25	34	41-40
Investment, dental; plaster and artificial stone, (plaster..	22	3	86)	
packaging of(investment..	26	13	50)	117-30
Insulators, porcelain, one-piece	272	210	23	73
Jacks, screw, bell-bottomsizes..	78	38	51	97-30
Japanned ware, tinware, and galvanized ware ..	1,154	873	24	55

(Please turn to page 4)

VARIETY REDUCTION EFFECTED BY THE APPLICATION OF SIMPLIFIED PRACTICE (Cont'd.)

Item	Varieties			S.P.R. No.
	Before simplification	After simplification	% reduction	
Lath, metal (expanded and sheet)	125	29	76	3-36
Lights; sidewalk, floor (sizes..	120	6	95)	
and roof(styles..	80	5	94)	49
.....(shapes..	10	2	80)	
Lining, brake, automobile	100	37	63	66
Lockers, steel	65	23	64	35-28
Lumber, rotary cut, for (lengths..	102	6	94)	59
wire-bound boxes(widths..	65	6	91)	
.....(thicknesses.	9	6	33)	
Millboard, asbestos; and (paper..	72	20	72)	19-37
asbestos paper(millboard..	21	5	76)	
Mirrors, dental cone-socketsizes..	7	4	43	137-32
Molds, brick, ice cream; and				
ice cream cartons mold sizes..	30	1	97	120-40
Nails, cut, small, and (sizes..	428	185	57)	47-28
cut tacks(packages..	423	127	70)	
Packages, saltpackages..	71	38	46	70
Packaging of dental plaster,				
investment, and artificial (plaster..	22	3	86)	117-30
stone(investment..	26	13	50)	
Packaging of insecticides and fungicides ...	38	25	34	41-40
Packaging, woven-wire fence; (styles ..	552	71	87)	9-28
and woven-wire fencing(pkg. sizes..	2,072	200	90)	
Paper, asbestos; and (paper..	72	20	72)	19-37
asbestos millboard(millboard ..	21	5	76)	
Paper, photographic	73	62	15	98-36
Pipe, wrought-iron and wrought-steel; and valves and fittingspipe sizes..	62	48	24	57-32
Pipe, conductor; and eaves trough; and fittings and ridge rolls.....varieties..	110	79	28	29-39
Plaster, adhesive	26	15	42	85-37
Plaster, dental; investment, and artificial stone, (plaster..	22	3	86)	117-30
packaging of(investment..	26	13	50)	
Radiators, large-tube, cast iron	33	17	49	174-40
Rasps and files	661	377	43	6-40
Refractories, malleable foundry	188	25	87	79-28
Ridge rolls, eaves trough, conductor pipe, and fittings	110	79	28	29-39

(Please turn to page 5)

VARIETY REDUCTION EFFECTED BY THE APPLICATION OF SIMPLIFIED PRACTICE (Cont'd.)

Item	Varieties			S.F.R. No.
	Before simplification	After simplification	% reduction	
Roofing, iron and steel	292	173	39	78-28
Rubber, dental (base and veneering).colors..	42	11	74	138-32
Scoops, shovels and spades (1st revision) ..	5,136	1,161	77	48
Screen cloth, insect, wire	360	154	57	122-31
Shells, loaded paper shot	4,067	262	94	31-39
Shovels, spades and scoops (1st revision) ..	5,136	1,161	77	48
Slate, blackboard	251	25	90	15-35
Slate, roofing,possible sizes..	1,260	309	75	14-28
Slate, structural	327	113	61	13-28
Spades, shovels, and scoops (1st revision)..	5,136	1,161	77	48
Spirals, steel, reinforcing,sizes..	7	4	43	53-32
Spools, metal, for annealing, handling, and shipping wire	8	6	25	63
Steel, sheet	1,630	209	87	28-29
Stone, artificial, dental; plaster and investment, (plaster ..	22	3	86)	117-30
packaging of,investment..	26	13	50)	
Sweeps, floor,block lengths..	11	7	36	88-37
Tacks, cut, and small (sizes..	428	185	57)	47-28
cut nails,packages..	423	127	70)	
Tags, shipping, paper,sizes..	16	8	50	93-39
Tanks, expansion; and range boilers	130	13	90	8-29
Tanks, storage, hot water,dimensions and capacities..	120	14	88	25
Tape, sealing, paper, No. 1 kraft,weights of paper..	8	3	62	114-30
Ternes, roofing	1,203	936	22	30-37
Textiles, cotton, hospital and institutional	454	26	94	74-30
Tile, building, hollow	36	22	39	12
Tinware, galvanized, and Japanned ware	1,154	873	24	55
Tools, forged	665	503	24	17-35
Towels, terry, fast selvage,sizes..	74	6	92	119-31
Traps, lavatory and sink, brass	1,114	76	93	21
Trough, eaves; and conductor pipe; and fittings and ridge rolls..varieties..	110	79	28	29-39
Turnbuckles,sizes..	248	115	54	71-28
Twines, hard-fiber (ply and yarn goods)	1,304	1,176	10	92-38
Units, building, concrete	45	22	51	32-38

(Please turn to page 6)

VARIETY REDUCTION EFFECTED BY THE APPLICATION OF SIMPLIFIED PRACTICE (Cont'd.)

Item	Varieties			S.P.R. No.
	Before simplifi- cation	After simplifi- cation	% re- duc- tion	
Valves, wrought-iron and wrought-steel; and pipe and fittingspipe sizes..	62	48	24	57-32
Wheelbarrows	125	27	78	105-32
Wheels, brush, dental	50	10	80	116-30
Wheels, buffing, full disk, stock diameters.	17	11	35	115-30
Wheels, grinding	715,200	254,400	64	45-39
Wheels, grinding, dental lathe	91	10	89	130-32

(End)