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Public Exhibitions for 1883.

The following is a list of the principal public exhibients

tious for 1882, at which the most recent and new inventions will be shown.	improv	eme	ents
STATE, PROVINCIAL, E	TC.		
American Institute, New York			
Arkansas, Little Rock			
Canada Dominion, St. John, N. B Canada Western, London	Oct.	2,	5
Canada Western, London	Oct. Sent 5	1, Oc	3 at.6
Colorado, Denver	July 17,	Sept	. 30
Connecticut, Meriden Delaware, Dover	Sept.	18, 94	21 20
Illinois Fat Stock, Chicago	Sept.	24,	29
Illinois Fat Stock, Chicago Indiana, Indianapolis	Nov.	14, 94	22 20
Iowa, Des Moines	Aug. 31,	Sep	t. 7
Kansas, Lawrence			
Kentucky, Lexington			
Louisville, Louisville			
Maryland, Baltimore.	Oct.	1,	6
Maryland, Baltimore Massachusetts Horticultural, Boston.	:Oct.	15,	20
Michigan, Detroit	Sept.	17,	21
Minnesota, Owatonna	Sept.	3,	8
Minn. Agri. & Mech., Minneapolis Mississippi, Aberdeen			
Mississippi Stock Breeders, Meridian	. Oct. 29	, No	v. 3
Montana, Helena			
New England, Manchester, N. H	Sept.	4,	7
New York, Rochester	Sept. Sept.	17, 10.	21 15
New York, Rochester			
Nova Scotia, Truro Ohio, Columbus			
Outario Provincial, Guelph	Sept.	24,	29
Ontario Central, Hamilton Oregon, Salem	Oct.	2, 17	5 22
Pennsylvania, Philadelphia		_	
Rhode Island, Providence			
St. Louis, St. Louis			
Texas, Austin			
Toronto Industrial Tri-State, Williams Grove, Pa			
Vermont, Burlington			
Virginia, Richmond			
West Virginia Central, Clarksburg	Sept.	18,	20
Wisconsin, Madison			14
Alleghany, Angelica			4
Broome, Whitney's Point	Sept.	11,	14
Carthage Union, Carthage Cattaraugus, Little Valley		25, 3,	27 6
Chautauqua, Jamestown	Sept.	5,	8
Chemung, Elmira	. , .Oct.	£2,	5
Columbia, Hudson	Sept.	25,	27
Cortland, Cortland		25, 11,	27 13
Delaware, Delhi	.Sept.	11,	13
Dutchess, Washington Hollow Erie, Hamburg		18, 25,	21 28
Essex, Westport	Sept.	25,	27
Franklin, MaloneFulton, Johnstown		26, 4,	28 6
Genesee, Batavia	Sept.	20,	22
Greene, Cairo		5, 10,	7 13
Jefferson, Watertown		18,	20
Lewis, Lowville		11,	14 4
Livingston, Geneseo Montgomery, Fonda		3, 11,	13
Moravia Union, Moravia		18,	20
Niagara, Lockport Opeida, Rome			29 21
Onondaga, Syracuse	Sept.	27, 17,	
Ontario, Canandaigua	Sept. Sept. Sept.	17, 18,	21
Orange, Middletown	Sept. .Sept. Sept.	17,	
Orange, Middletown Orleans, Albion	Sept. Sept. Sept. Sept. Sept. Sept.	17, 18, 25, 18, 27,	21 27 21 29
Orange, Middletown	Sept. Sept. Sept. Sept. Sept. Sept. Sept.	17, 18, 25, 18, 27, 11,	21 27 21 29 13
Orange, Middletown Orleans, Albion Oswego, Mexico Otsego, Cooperstown Putnam, Carmel	Sept.	17, 18, 25, 18, 27, 11, 24, 11,	21 27 21 29 13 27 14
Orange, Middletown Orleans, Albion Oswego, Mexico Otsego, Cooperstown Putnam, Carmel. Queens, Mineola	Sept.	17, 18, 25, 18, 27, 11, 24, 11, 25,	21 27 21 29 13 27 14 27
Orange, Middletown Orleans, Albion Oswego, Mexico Otsego, Cooperstown Putnam, Carmel Queens, Mineola Rensselaer, Lansingburg Rockland, Spring Valley	Sept. Cot.	17, 18, 25, 18, 27, 11, 24, 11, 25, 11,	21 27 21 29 13 27 14 27 14
Orange, Middletown Orleans, Albion Oswego, Mexico Otsego, Cooperstown Putnam, Carmel. Queens, Mineola Rensselaer, Lansingburg. Rockland, Spring Valley Rushville Union, Rushville	Sept. Coct.	17, 18, 25, 18, 27, 11, 24, 11, 25, 11, 2, 5,	21 27 21 29 13 27 14 27 14 6
Orange, Middletown Orleans, Albion Oswego, Mexico Otsego, Cooperstown Putnam, Carmel. Queens, Mineola Rensselaer, Lansingburg. Rockland, Spring Valley Rushville Union, Rushville St. Lawrence, Canton Sandy Creek, R. O. & B., Sandy Creek.	Sept.	17, 18, 25, 18, 27, 11, 24, 11, 25, 5, 11,	21 27 21 29 13 27 14 27 14 4 6
Orange, Middletown Orleans, Albion Oswego, Mexico Otsego, Cooperstown Dutnam, Carmel. Queens, Mineola Rensselaer, Lansingburg. Rockland, Spring Valley Rushville Union, Rushville St. Lawrence, Canton Sandy Creek, R O. & B., Sandy Creek Saratoga, Ballston Spa	Sept.	17, 18, 25, 18, 27, 11, 24, 11, 25, 11, 5, 11,	21 27 21 29 13 27 14 27 14 6 13 7
Orange, Middletown Orleans, Albion Oswego, Mexico Otsego, Cooperstown Putnam, Carmel. Queens, Mineola Rensselaer, Lansingburg. Rockland, Spring Valley Rushville Union, Rushville St. Lawrence, Canton Sandy Creek, R. O. & B., Sandy Creek Saratoga, Ballston Spa Schenectady, Schenectady Schoharie, Schoharie	Sept. Cot. Sept. Oct. Sept. Sept.	17, 18, 25, 18, 27, 11, 24, 11, 25, 5, 11,	21 27 21 29 13 27 14 27 14 4 6 13 7 14 28 4
Orange, Middletown Orleans, Albion Oswego, Mexico Otsego, Cooperstown Putnam, Carmel Queens, Mineola Rensseiaer, Lansingburg Rockland, Spring Valley Rushville Union, Roshville St. Lawrence, Canton Sandy Creek, R. O. & B., Sandy Creek Saratoga, Ballston Spa Schenectady, Schenectady Schoharie, Schoharie Schuyler, Watkins	Sept. Oct. Sept. Sept. Sept.	17, 18, 25, 18, 27, 11, 24, 11, 25, 5, 11, 5, 11, 25, 2, 3,	21 27 21 29 13 27 14 27 14 4 6 13 7 14 28 4
Orange, Middletown Orleans, Albion Oswego, Mexico Otsego, Cooperstown Putnam, Carmel. Queens, Mineola Rensselaer, Lansingburg. Rockland, Spring Valley Rushville Union, Rushville St. Lawrence, Canton Sandy Creek, R. O. & B., Sandy Creek Saratoga, Ballston Spa Schenectady, Schenectady Schoharie, Schoharie	Sept. Oct. Oct. Sept.	17, 18, 25, 18, 27, 11, 24, 11, 25, 11, 5, 11, 5, 11, 25, 26,	21 27 21 29 13 27 14 27 14 4 6 13 7 14 28 4

Wyoming, Warsaw	Sent.	19.	20	French Creek Valley, Countainton Sept.	1~,	14	٠.
Yates, Penn Yan			4	Gratz Driving Park, GratzSept.	18,	21	
MAINE.	Oct.	٠,	- T	Harford, Harford Sept.	26,	27	1
MAINE.			į	Indiana, IndianaOct.	2,	6	1
Aroostook, Houlton				Jefferson, BrookvilleOct.	2,	5	. 1
Cumberland, Portland	.Sept.	11,	14	Juniata, Port RoyalOct.	3,	5	•
Franklin, Farmington	.Oct.	9,	11	Keystone, Kutztown Sept.	18,	21	1
Kennebec, Readfield	Oct.	2,	4	Keystone and Buckeye, Sharon Sept.			1
Knox North, Hope Corner	Oct.	9,	11	Lackawanna, ScrantonSept.	18,	21	(
Lincoln, Damariscotta	.Oct.	2,	4	Lancaster, Lancaster Sept.	17,	21	t
Oxford, Norway	.Oct.	2,	4	Lawrence, New CastleSept.	11,	14]
Oxford West, Fryeburg	Oct.	9,	11	Lebanon, Lebanon			
Penobscot West, Exeter	Sept.	25,	26	Leechburg, Leechburg Sept.	27,	29	8
Plscataquis East, Milo	Sept.	26,	27	Lehigh, AllentownSept.	25,	28	7
Sagaqahoc, Topsham	Oct.	9.	11	Tugama WyomingSept.	11.	13	•

Suffolk, Riverhead...... Oct.

 Sullivan, Monticello
 Oct. 2, 4

 Tioga, Owego
 Sept. 11, 13

 Tompkins, Ithaca
 Sept. 25, 27

Washington, Sandy Hill Sept. 4,

Chester, Chester,

HILS.	Caledonia, St. Johnsbury	10,	20	
	Dog River Valley, NorthfieldSept.	25,	27	
	Franklin, Sheldon	29,	31	
	Lamoille Valley, Morristown Sept.	25,	27	
n 1	Mad River Valley, WaitsfieldSept.	18,	19	i
20	Orange, BradfordSept.	25,	27	İ
15	Poultney, Poultney Sept.	18,	20	
5	Rutland, Rutland	5,	7	
3	Union, Bellevue ParkSept.	5,	7	
t. 6	White River, BethelSept.	18,	20	
. 30	MASSACHUSETTS.			

VERMONT.

meshury and Salisbury, Newburyport,

Autesouty and Satisbuty, Newburyport.	.Oct.	٠,	U	I
Barnstable, Barnstable	.Sept.	23,	25	Į
Berkshire, Pittsfield	.Oct.	2,	4	ŀ
Berkshire Central, Lee	.Sept.	12,	13	
Bristol, Taunton	.Sept.	25,	27	l
Deerfield Valley, Charlemont	Sept.	20,	21	l
Essex, Haverhill	.Sept.	25.	26	İ
Franklin, Greenfield	Sept.	27,	28	
Grafton, Farmers' Club	. ' 1	Sept.	13	l
Hampden, Chicopee	.Sept.	25,	27	l
Hampden East, Palmer	Sep₄.	18,	19.	ļ
Hampshire, Amherst			21	ļ
Hampshire, Franklin, etc., Northampton	.Oct.	3,	5	I
Highland, Middlefield	.Sept.	13,	14	l
Hingham, Hingham	.Sept.	25,	26	l
Hoosac Valley, North Adams	. Sept.	18,	19	l
Housatonic, Great Barrington	.Sept.	26,	28	l
Lancaster Farmers' Club		Sept.	26	l
Marshfield, Marshfield	.Sept.	12,	14	l
Martha's Vineyard, West Tisbury	.Oct.	2,	3	ļ
Middlesex, Concord			27	I
Middlesex North, Lowell	.Sept.	25,	26	I
				I

Worcester South, Sturbridge Sept. 13, RHODE 1SLAND.

Worcester Northwest, AtholOct. 2,

Middlesex South, Framingham.Sept. 18, 19

Worcester, Worcester......Sept. 20, 21

Worcester North, Fitchburg.....Sept. 25, 26

Plymouth, Bridgewater.....Sept. 19, 21

Washington,	West KingstonSept.	18,
Woonsocket,	Woonsocket Sept.	18,

CONNECTICUT.

Clinton, Clinton	(Oct.	
Danbury, Danbury	Oct.	1,	
Fairfield, Norwalk	Sept.	11,	
Farmington Valley, Canton	Sept.	25,	
Guilford, Guilford	5	Sept.	
Killingworth, Killingworth	5	Sept.	. :
Milford and Orange, Milford	Sept.	18,	
New London, Norwich	Sept.	25,	,
New Milford, New Milford	Sept.	27,	,
New Milford, New Milford. Southington, Southington Tolland East, Stafford Springs.	Oct.	· 9,	
Tolland East, Stafford Springs	Oct.	10,	4
Union, Huntington	Sept.	19,	,
Watertown, Watertown	Sept.	25,	9
Westbrook, Westbrook	(Oct.	
Willimantic Farmers' Club, Willimantic	Oct.	2,	
Windham, Brooklyn	Sept.	18,	
Woodbridge and Bethany, Woodbridge	Oct.	3,	
Woodbury, Woodbury	Sept.	12,	
Woodstock South, Woodstock	Sept.	25,	,
NEW JERSEY.			

Bergen, Hohokus	Sept.	25,	27
Burlington, Mt. Holly	Oct.	9,	12
Cumberland, Bridgeton	Sept.	5,	6
Egg Harbor City	Sept.		
Hunterdon, Flemington	Sept.	25,	27
Monmouth, Freehold	Sept.	11,	14
Moorestown, East Moorestown	Sept.	14,	15
Morris, Morristown	Sept.	11,	13
Salem, Woodstown	Sept.	11,	13
Somerset, Somerville	Oct.	2,	4
Sussex, Newton	Oct.		
Union and Middlesex, Plainfield	Sept.	24,	27
West lorger Woodstown	Cont	10	19

PENNSYLVANIA.

Bedford, Bedford	.Oct.	9,	12
Berks, Reading	Oct.	2,	5
Bradford, Tonawanda	Oct.	2,	4
Butler, Butler			20
Canton Union, Canton	Sept.	19,	21
Carbon, Lehighton	Oct.	2,	5
Chartiers Valley, Canonsburg	.Aug.	21,	23
Chester, West Chester	. Sept.	20,	55
Columbia, Bloomsburg	Oct.	10,	13
Crawford, Conneautville	Oct.	₹3,	5
Cumberland, Carlisle	Sept.	25,	28
Dauphin, Harrisburg	Oct.	2,	5
Dayton, Daytou	.Sept.	25,	28
Delaware, Elwyn	Oct.	3,	6
Doylestown, Doylestown	.Oct.	2,	5
Eastern Farmers' and Mech. Institute	Sept.	11,	14
Erie, Erie	Sept.	25,	2 8
Fayette, Uniontown	Sept.	25,	28
French Creek Valley, Cochranton	. Sept.	12,	14
Gratz Driving Park, Gratz	Sept.	18,	21
Harford, Harford	Sept.	26,	27
ndiana, Indiana	Oct.	2,	6
Jefferson, Brookville		2,	5
Inniete Port Povel	Oct '	Я	5

mercer central, mercer	sept.	υ,	•
Northern Montour, Washingtonville	Oct.	16,	19
Northampton, Nazareth	Oct.	2,	5
Northumberland, Sunbury	Sept.	18,	21
Northwestern, Corry	Oct.	3,	5
Oil Creek Valley, Titusville	Sept.	25,	27
Oxford, Oxford	Sept.	26,	28
Petroleum, Parker's Landing	Sept.	25,	28
Potter, Coudersport	Sept.	25,	28
Punxsutawny, Punxsutawny	Sept.	24,	28
Rich Hill, Jacksonville	Sept.	26,	27
Ringtown, Ringtown	Sept.	18,	21
Schuylkill, Orwigsburg	Sept.	25,	28
Synder, Selinsgrove	Oct.	4,	6
Somerset, Somerset	Sept.	25,	27
Sullivan, Forksville	Oct.	2,	4
Susquehanna, Montrose	Sept.	18,	19
Troy, Troy	Sept.	25,	2
Union, Lewisburg	Oct.	3,	6
Union City, Union City	Sept.	18,	2
Venango, Franklin			Ę
Warren, Sugar Grove			18
Washington, Washington			2
Washington Union, Burgettstown		2,	4
Wayne Honesdale		10.	19

DELAWARE.

York, York.... Oct.

Wellsbore, Wellsboro Sept. 19, 22 Wyoming, TuukhannockSept. 26,

Peninsular, Middletown...... Sept., 18, 20 MARYLAND.

Baltimore, TimoniumSept.	4,	7
Cecil, ElktonOct.	2,	5
Frederick, Frederick Oct.	9,	12
Harford, Bel AirOct.	9,	12
Kent, Warton Station Sept.	11,	13
Washington. HagerstownOct.	16,	19

ENGINEERING INVENTIONS.

Mr. J. A. Wheeler, of Vandalia, Mo., has recently patented a lubricator for engine cylinders, the object of which is to provide for giving a regular and Worcester Southeast, Milford Sept. 25, 27 graduated supply of oil to engine cylinders and valves in the combination, with an oil cup, of a plunger feed

> Mr. S. R. Jones, of Lacon, Ill., has obtained a patent on an improved car coupling, which possesses some features not found in any previously patented coupling. In the drawbar the inventor arranges a hook coupler which swings down to receive the link. A crank device is thrown down by the shock of the cars coming together, and engages the link with the coupler without the aid of any attendant. Arrange. ments are made for coupling cars of different heights with Mr. Jones' coupler.

A novel hydraulic pile driver has recently been patented by Messra, J. W. Surprenant and J. E. Ferguson, of Astoria, Oregon. The invention consists of a bent pipe nospect to the against the side of the pile 21 and in a longitudinal groove in the pile. The pipe is held against the pile and in the groove, and is provided with means for raising it after the pile has been sunk. Means are provided for coupling a hose pipe with the pile pipe. If water is forced through the pipe and ejected from the lower end of the same, it washesaway the sand under the pile and causes it to descend into the ground.

MECHANICAL INVENTIONS.

An important improvement has recently been patented for rendering elevator cars safe from falling in the event of the hoist rope breaking. The apparatus was designed especially for freight, coal, and mining attposes, but it may be used on passenger elevators with equal advantage. A series of stops are so 11, 13 arranged that, in case of accident, they fall and lodge under the car, stopping its descent immediately. Messrs. E. L. Parker and S. Peterson, of Queensville, Ind., are

Mr. John S. Griffin, of Newburg, Cleveland, O., has patented an improved rolling mill, for rolling spriugs and sleigh shoes, and tapering the same on the flat sides and edges. On a shaft above the rolls Armstrong, Kittanning...... Sept. 11, 14 double cams are mounted directly above the bearing blocks, so that when the shaft is rotated the double cams will present the bearing blocks, and will thus depress the journal boxes of the upper roller and move the roller, so as to impart the proper form to the spring or sleigh shoe.

Mr. William Whitely, of Housatonic, Mass. has recently secured a patent for a safety stop for elevators. A frame passes across the top and down the sides of the carriage, and connected with it by cams and links, and namially supported by a weight and cord, so that the descent of the carriage within the frame will apply the cams and stop the downward movement when links with the top of the carriage are placed rubber blocks, to relieve the jar when the descent of the carriage is stopped by the cams.

An ore roasting furnace of the class where a cylinder is fitted for revolution within the furnace, 14 has recently been patented by Mr. R. L. Thompson, of Boulder, Colo. The ore is fed in a continuous stream through a hopper into the cylinder, which is heated externally by a furnace. Air is supplied by a blower; in its passage into the cylinder it becomes heated, thereby effecting economy in the use of fuel. As the cylinder revolves the ore is lifted by tubes to the upper side and then dropped to the bottom, and is thus worked till dis-charged into a flue, through which it passes exposed to the action of a flame from the furnace, and is finally landed on a hearth.

Lawrence, New Castle......Sept. 11, 14 A machine for amalgamating the gold and 5, 26 Leechburg, Leechburg..... Sept. 27, 29 silver in pulverized ores, is the subject of letters patent Sagaoahoc, Topsham Oct. 9, 11 Luzerne, Wyoming Sept. 11, 13 city. In using this machine, pulverized ore and heated Lycoming, Williamsport Oct. 9, 11 Luzerne, Wyoming Lycoming, Williamsport Oct. 2, 4 water are introduced in a wooden cylinder in about Oak Park, Greenfield Sept. 18, 19 Mercer, Stoneboro Sept. 25, 27 ton of ore. When the cylinder is about seven-eighths be used for producing the same yeast-like substance.

full, two pounds of bromine or bromide of sodium for each ton of ore is added, and steam is admitted into space between the wooden cylinder and the iron casing to keep the contents of the wooden cylinder hot. The cylinder is revolved until all the gold and silver in the ore is thoroughly bromidized, so that it will readily B amalgamate with quicksilver. A suitable quantity of quicksilver is then introduced into the cylinder, and the revolution of the cylinder is continued for two or three hours, after which the contents are treated in the ordinary manner to separate the amalgam from the ore.

AGRICULTURAL INVENTIONS.

Mr. James F. Miller, of Spring Station, Ind., has patented an attachment to mowing and reaping machines to prevent the knives and knife bar from hecoming clogged with dirt in the groove of the finger bar. The attachment consists of a plate attached to the finger bar in such a way as to effectually cover and close the joint between it and the back of the knife bar. The said plate serves also as a substitute for the cleats commonly employed to hold the knife bar down in its

simple and effective device for use in barns to distribute hay to the outer parts of the loft as it is discharged from a carrier, has been patented by Mr. Frank Baylis, of Amenia, N. Y. An apron is hinged at its lowest part to the beams of the barn by an iron rod, and it is supported at its upper part in an inclined position by bars attached to the rafters. hay when dropped from the carrier slides down the apron and is projected to the outer part of the mow.

MISCELLANEOUS INVENTIONS.

A simple and convenient ribbon holder has recently been patented by Mr. John Mellette, of Winamac, Ind. A wire having its ends bent passes into the center of the ribbon holder, and is folded over to rest on the ribbon in such a way as to prevent its unrolling except as desired for use.

A roll for ribbons, tape, etc., which is both light and inexpensive, has recently been patented by Mr. John Mellette, of Winamac, Ind. A strip of veneer rod, acting to supply a quantity of oil to the steam or thin sheet of wood is cut out by a die or otherwise, in such a form as when folded and glued they make a complete roller much lighter and stronger than the ordinary solid wood or spasteboard ribbon roll and cost-

> Mr. M. W. Newcomb, of Marysville Kas. is the patentee of a new improvement in photographic plate holders, by which accuracy of focus and rapidity of work is accomplished. The plate holder is reversible to receive different sized plates on opposite sides of the holder. This invention is important to photographers who have several persons to photograph on different sized plates about the same time.

An ornamental napkin holder, to take the place of the ordinary ring holder, has been patented by Mr. C. S. Dikeman, of Waterbury, Conn. The napkin when folded rests in a U-shaped receptacle having feet for its support. Within the napkin receptacle is a chain on which the napkin rests. To remove the napkin the chain is drawn down and the napkin is raised. The new holder combines ornamental as well as useful qualities, and may be made of almost any material.

A patent for protecting wooden piles of bridges, docks, etc., from worms and insects or from the effect of alternate wetting and drying, has been patented by Mr. D. H. Valentine, of Brooklyn, N. Y. A mould is placed around the pile which is to be treated, after it has been driven into the ground. Portland or other cement is then poured into the mould after the water has been pumped out. After the cement becomes hard the shield is removed, when a canvas shield is stitched around the pile to protect the cement.

An apparatus for heating barrels after being set up in truss hoops, so that the staves will retain their curvature and not straighten out when the hoops are removed, has been patented by Mr. Paul Weidmann, of Brooklyn, N. Y. The barrel to be heated is placed on a metal stand perforated with holes, through which hot air is forced from a furnace or heater by means of a blower; a cylindrical drum covers the barrel to prevent the escape of the hot air.

An invention to facilitate the removal of the carbon deposited upon the inner surfaces of the stand pipes of gas works, has recently been patented by Mr. John Clark, of New York city. The invention consists in a pipe clearer, made with a cutter having a central perforation to receive a rod, which is provided with collars above and below the cutter. The rod serves as a hammer to force the cutter through the pipe. The rod is also provided with a cap to keep it in the center of the pipe while the tool is being used.

A spring bed bottom, constructed in such a manner as to be strong and durable, and in which the springs will not be liable to get out of place, has reit is desired. Upon the bolts that connect the cam cently been patented by Mr. Charles J. Mengel, of New York city. With cross springs are connected re-enforcing springs, the ends of which rest upon the middle bends of the cross springs, and are held from lateral movements by longitudinal connecting wires placed above and below. The cross springs are kept in place by passing the lower wires through loops formed upon the upper wires and passed down through perforations in the said springs.

A new process for the manufacture of beer, sirup, distilled liquors, etc., has recently been patented by Messrs. A. E. & W. E. Feroe, the former residing at Albany and the latter at Poughkeepsie, N. Y. The principal feature of the invention consists in the process of forming a mash from corn meal by boiling it for about an hour in water, and letting it cool down to a temperature of 1500 to 1600, adding a small quantity of malt flour, and putting the material through sundry otler simple processes, producing, it is claimed, a substance equal to barley malt. The inventors show in their pa-

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