#### Public Exhibitions for 1883.

The following is a list of the principal public exhibitions for 1883, at which the most recent improvements and new inventions will be shown.

#### STATE, PROVINCIAL, ETC.

American Institute, New YorkOct. 3, Dec. 1
Arkansas, Little RockOct. 16, 20
California, Sactamento Sept. 10, 15
Canada Dominion, St. John, N. BOct. 2, 5
Canada Western, LondonOct. 1, 3
Cincinnati Industrial, Cincinnati Sept. 5, Oct. 6
Colorado, DenverJuly 17, Sept. 30
Connecticut, Meriden
Delaware, Dover
Illinois Fat Stock, Chicago
Indiana, Indianapolis
Kansas, Lawrence
Kansas, Topeka
Kentucky, Lexington Aug. 28, Sept. 1
Louisville, Louisville
Marc, Lewiston
inantitota Provincial, Portage la Prairie,Oct. 1, 6
Maryland, Baltimore Oct. 15, 20
Massachusetts Horticultural, Boston Sept. 18, 21
Michigan, Detroit
Minnesota, Owatonna
Minn. Agri. & Mech., Minneapolis Aug. 27, Sept. 1
Mississippi, AberdeenOct. 22, 27
Mississippi Stock Breeders, Meridian Oct. 29, Nov. 3
Montana, Helena
Nebraska, Omaha
New England, Manchester, N. H
New Jersey, Waverley Sept. 17, 21
New York, Rochester
North Carolina, Raleigh Oct. 15, 20
Nova Scotia, Truro
Ohio, Columbus
Outario Provincial, Guelph
Ontario Central, HamiltonOct. 2, 5
Oregon, Salem
Pennsylvania, Philadelphia
Rhode Island, Providence Sept. 25, 28
St. Louis, St. Louis Oct. 1, 6
South Carolina, ColumbiaNov. 13, 16
Texas, Austin
Toronto Industrial Sept. 11, 22
Tri-State, Williams Grove, Pa Aug. 20, 26
Vermont, BurlingtonSept. 10, 14
Virginia, RichmondOct. 31, Nov. 2
West Virginia, Wheeling Sept. 10, 15
West Virginia Central, Clarksburg Sept. 18, 20
Wissen in Median
Wisconsin, Madison Sept. 10, 14
COUNTY AND LOCAL-NEW YORK.

Cattaraugus, Little Valley......Sept. 3, Chautauqua, Jamestown......Sept. 5, 6 Chemung, Elmira......Oct. 122, Columbia, Ohas Columbia, Hudson ...... Sept. 25, 27 27 Franklin, Malone......Sept. 26, 28 Genesee, Batavia ...... Sept. 20, Greene, Cairo...... Sept. 5, 7 Jefferson, Watertown ...... Sept. 18, 20 Lewis, Lowville... .... Sept. 11, 14 Moravia Union, Moravia ...... Sept. 18, 20 Niagara, Lockport ...... Sept. 27, 29 Orange, Middletown ..... Sept. 18, Oswego, Mexico ...... Sept. 11, 13 Putnam, Carmel...... Sept. 11, 14 Queens, Mineola .... Sept. 25, Rensselaer, Lansingburg...... Sept. 11, Rockland, Spring Valley ...... Oct. Rushville Union, Rushville ..... Oct. 14 Schoharie, Schoharie ..... Oct. 2, 4 Schuyler, Watkins... Oct. - 3, 5 Seneca, Waterloo...... Sept. 26, 28 

## VERMONT.

Scientific American.

Addison, Middlebury Sept.	3,	5
Caledonia, St. Johnsbury	18,	20
Dog River Valley, NorthfieldSept.	25,	27
Franklin, Sheldon Aug.	29,	31
Lamoille Valley, Morristown	25,	27
Mad River Valley, Waitsfield Sept.	18,	19
Orange, Bradford Sept.	25,	27
Poultney, PoultneySept.	18,	20
Rutland, Rutland	5,	7
Union, Bellevue ParkSept.	5,	7
White River, Bethel	18,	20

0	MASSACHUSETTS.		,	
1	Amesbury and Salisbury, Newburyport.	Oct	2,	6
9	Barnstable, Barnstable			25
9	Berkshire, Pittsfield		2,	4
2 9	Berkshire Central, Lee	.Sept.	12,	13
5 7.	Bristol, Taunton	.Sept.	25,	27
8	Deerfield Valley, Charlemont			21
5	Essex, Haverhill.			26
1	Franklin, Greenfleld Grafton, Farmers' Club	. sept.	27, Sept.	28 13
ופ	Hampden, Chicopee			27
1	Hampden East, Palmer	.Sept.	18,	19
6 0	Hampshire, Amherst	.Sept.	20,	21
1	Hampshire, Franklin, etc., Northampton		3,	5
1	Highland, Middlefield			14
B	Hingham, Hingham			26 10
1	Hoosac Valley, North Adams			19 28
7	Lancaster Farmers' Club			
3	Marshfield, Marshfield			14
5 8	Martha's Vineyard, West Tisbury			3
7	Middlesex, Concord			
1	Middlesex North, Lowell			
5	Middlesex South, Framingham.			19
0	Nantucket, Nantucket			
1	Union, Blandford			21
7	Westboro, Westboro			
9	Worcester, Worcester			21
2	Worcester North, Fitchburg	.Sept.	25,	26
	Worcester Northwest Athol	.Oct.	2,	3
	Worcester South, Sturbridge	. Sept.	13,	14
5 '	Worcester South, Stationage	Sopt.	20, 97	27 28
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2 5	Washington, West Kingston	.Sept.	18,	
1	Woonsocket, Woonsocket	. Sept.	18,	20
2	CONNECTICUT.			
5	Chester, Chester		Sept.	26
	Clinton, Clinton	. (	Oct.	3
1				6
1	Fairfield, Norwalk			
1	Farmington Valley, Canton			28 95
٤	Guilford, Guilford		Sept. Sept,	
ſ	Milford and Orange, Milford		18.	19
3 3	New London, Norwich			
5	New Milford, New Milford	Sept.	27.	29
2	Southington, Southington. Tolland East, Stafford Springs Union, Huntington.	<u>. Oc</u>	-9 	11
7	Tolland East, Stafford Springs	. Oet.	10, 10	11 <sup>-</sup> 01
7	Union, Huntington	.Sept.	19, 25	27
3	Westbrook	. (	Oct.	10
l	Willimantic Farmers' Club, Willimantic.	.Oct.	2,	4
8	Windham, Brooklyn		18,	20
7	Woodbridge and Bethany, Woodbridge		8,	4
2	Woodbury, Woodbury			13 27
5	Woodstock South, Woodstock	. eehi•	25,	~'
	NEW JERSEY.	<b>.</b> .		
1	Atlantic, Hammonton		25,	27
1	Burlington, Mt. Holly		20, 9,	27 12
ŀ	Cumberland, Bridgeton.		<sup>,</sup> 5,	6
ł	Egg Harbor City	.Sept.	, .	
1	Hunterdon, Flemington	.Sept.	25,	27
	Monmouth, Freehold	.Sept.	11,	14
1	Moorestown, East Moorestown	. Sept.	14,	15
Ì	Morris, Morristown		11, 11,	13 i 13
•	Somerset, Somerville		2,	4
ιļ	Sussex, Newton	.Oct.		
	Union and Middlesex, Plainfield	.Sept.	24,	27
:	West Jersey, Woodstowu	.Sept.	12,	18
	PENNSYLVANIA.	~		
	Armstrong, Kittanning	.Sept.	11,	14
ł	Beaver, Beaver		11,	15
ŀ	Bedford, Bedford		9,	12
5	Berks, Reading		2, 2	5 4.
1	Bradford, TonawandaButler, Butler		2, 18,	4 20
	Canton Union, Canton		19,	21
ľ	Carbon, Lehighton	Oct.	2,	δ.
	Chartiers Valley, Canonsburg	.Aug.	21,	23
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Crawford, Conneautville .... Oct. 3,

Manager Gaugeral Manager 1	5.	7				
Mercer Central, Mercer Sept. Northern Montour, WashingtonvilleOct.	э, 16.	19				
Northampton, NazarethOct.	2,	19 5				
Northumberland, Sunbury	18,	21				
	3.	5				
Northwestern, CorryOct.		5 27				
Oil Creek Valley, Titusville	25,					
Oxford, Oxford Sept.	26,	28 20				
Petroleum, Parker's Landing Sept.	25,	28				
Potter, Coudersport Sept.	25,	28				
Punxsutawny, Punxsutawny	24,	28				
Rich Hill, JacksonvilleSept.	26,	27				
Ringtown, Ringtown Sept.	18,	21				
Schuylkill, OrwigsburgSept.	25,	28				
Synder, SelinsgroveOct.	4,	6				
Somerset, SomersetSept.	25,	27				
Sullivan, ForksvilleOct.	2,	4				
Susquehanna, Montrose	18,	19				
Troy, Troy Sept.	25,	28				
Union, LewisburgOct.	3,	6				
Union City, Union City Sept.	18,	21				
Venango, Franklin Oct.	2,	5				
Warren, Sugar Grove	11,	13				
Washington, Washington	25,	28				
Washington Union, Burgettstown Oct.	2,	4				
Wayne, Honesdale. Oct.	10,	12				
Wellsbore, Wellsboro	.19,	22				
Wyoming, Tuukhannock	26,	28				
York, YorkOct.	2,	5				
DELAWARE.						
Peninsular, Middletown Sept.,	18,	20				
MARYLAND.						
Baltimore, TimoniumSept.	4,	7				
Cecil, ElktonOct.	2,	5				
Frederick, Frederick Oct.	9,	12				
Harford, Bel Air Oct.	9,	12				
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# Kent, Warton Station ...... Sept. 11, 13 Washington. Hagerstown ...... Oct. 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 graduated supply of oil to engine cylinders and valves by automatic means operated by the engine. It consists in the combination, with an oil cup, of a plunger feed pipe.

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. Arrangements are made for coupling cars of different heights with Mr. Jones' coupler.

A novel hydraulic pile driver has recently been patented by Messis, J. W. Surprenant and J. E. Ferguson, of Astoria, Oregon. The invention consists or a bent pipe soupred to fit against the side of the pile 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 marposes, but it may be used on passenger elevators with equal advantage. A series of stops are so 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 the patentees.

Mr. John S. Griffin, of Newburg, Cleveland, O., has patented an improved rolling mill, for rolling springs and sleigh shoes, and tapering the same on the flat sides and edges. On a shaft above the rolls double cams are mounted directly above the bearing blocks, so that when the shaft is rotated the double cams will pressum 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 Chester, West Chester ...... Sept. 20, 22 Columbia, Bloomsburg......Oct. 10, 13 sides of the carriage, and connected with it by cams and links, and partially supported by a weight and cord, so 5 that the descent of the carriage within the frame will apply the cams and stop the downward movement when springs will not be liable to get out of place, has reo relieve the jar when the descent of the carstopped by the cams, re roasting furnace of the class where er is fitted for revolution within the furnace, ntly been patented by Mr. R. L. Thompson, of a hopper into the cylinder, which is heated ex- in the said springs. by a furnace. Air is supplied by a blower; in its into the cylinder it becomes heated, thereby economy in the use of fuel. As the cylinder the ore is lifted by tubes to the upper side and pped to the bottom, and is thus worked till disinto a flue, through which it passes exposed to n of a flame from the furnace, and is finally n a hearth. achine for amalgamating the gold and pulverized ores, is the subject of letters patent issued to Mr. Witliam E. Harris, of New York using this machine, pulverized ore and heated ortion of three hundred pounds of water to a e. 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 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.

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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 place.

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 in-clined position by bars attached to the rafters. The 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 costing less.

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 header, 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 vapkin 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 ired. Upon the bolts that connect the cam cently been patented by Mr. Charles J. Mengel, of New th the top of the carriage are placed rubber 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 Colo. The ore is fed in a continuous stream the upper wires and passed down through perforations 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 150° to 160°, adding a small quantity of maltflour, and putting the material through sundry of ler simple processes, producing, it is claimed. a substance equal to barley malt. The inventors show in their patent drawings an apparatus which may be used in pree introduced i...o a wooden cylinder in about paring the new material, but the invention is not limited to the machinery described, for other appliances may

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Steuben, Bath Sept.	25,	-28	Cumberland, CarlisleSept.	, .	28	apply the
Suffolk, Riverhead Oct.	2,	4	Dauphin, HarrisburgOct.	2,	о ~~	it is desir
Sullivan, MonticelloOct.	2,	4	Dayton, Daytou		28	links with
Tioga, Owego Sept.	11,	13	Delaware, Elwyn	3,	6	blocks, to
Tompkins, IthacaSept.		27	Doylestown, Doylestown	2,	5	riage is st
Washington, Sandy Hill Sept.			Eastern Farmers' and Mech. Institute Sept.			An or
Wayne, Lyons			Erie, Erie			
	2.	5	Fayette, Uniontown		28	a cylinder has recent
Wyoming, WarsawSept.	19,	20	French Creek Valley, Cochranton Sept.			Boulder. (
	2.	4	Gratz Driving Park, GratzSept.			,
MAINE.	,	-	Harford, Harford Sept.	26, 2	27	through a
			Indiana, IndianaOct.	2,	6	ternally b
Aroostook, Houlton			Jefferson, BrookvilleOct.	2,	5	passage in
Cumberland, Portland			Juniata, Port RoyalOct.	З,	5	effecting e
	9,	11	Keystone, Kutztown Sept.	18, 2	21	revolves t
· · · · · · · · · · · · · · · · · · ·	2,	4	Keystone aud Buckeye, Sharon	12, 1	15	then drop
Knox North, Hope CornerOct.	9,	11	Lackawanna, ScrantonSept.	18, 2	21 <sup>:</sup>	charged in
Lincoln, DamariscottaOct.	2,	4	Lancaster, Lancaster	17, 5	21	the action
Ox ord, NorwayOct.	2,	4	Lawrence, New CastleSept.	11, 1	14 ]	landed on
Oxford West, Fryeburg Oct.	9,	11	Lebanon, Lebanon	), 1	12	A mac
Penobscot West, Exeter	25,	26	Leechburg, Leechburg Sept.		29	silver in P
Plscataquis East, Milo	26,	27	Lehigh, Allentown			recently is
Sagaoahoc, Topsham	9,	11	Luzerne, Wyoming			city. Inu
NEW HAMPSHIRE.						water are
	25.	27	McKean, Port Alleghany Oct.	9, 1	11.	the propor
Oak Park Greenfield Sept.	18.	19	Mercer, Stoneboro	25, 2	27	ton of ore.
Cane & MARY CICCUMCIU	-01	••				