INDEX OF INVENTIONS

For which Letters Patent of the

United States were Issued

for the Week Ending

OCTOBER 30, 1900,

AND EACH BEARING THAT DATE.

# **RECENTLY PATENTED INVENTIONS.** Agricultural Implements.

CHURN.-JAMES M. Goss, Pekin, Ind. The inven-manufacture of door or drawer-knobs and insures pertor has devised a simple and cleanly construction of upright churn and driving mechanism readily attachable to and detachable from the churn. The mechanism in question consists of a bevel-gear, the periphery of which is engaged by two bevel-pinions. One bevel pinion is loosely mounted on the dasher-shaft, and the other is rigidly secured to the shaft. By means of this construction, the body of the churn is turned in one direction and the dasher in the opposite direction.

CHURN.-WICKLIFF B. MITCHELL. Owensburg, Ind. To secure a quick forward and backward turning motion of the dasher Mr. Mitchell employs a novel means of  $% \mathcal{A}(\mathcal{A})$ adjusting the height of the dash. Arms extend outward from a standard and have forked ends forming bearings for the dasher-rod. A series of annular channels are formed in the rod; and flanges on the forked members of one of the arms engage in any of the channels to support the rod in adjusted vertical position.

PLOW.-JOHN N. HANNA. Del Norte, Colo. The invention relates to a class of plows provided with two shares and moldboards located at opposite beams, and with means for bringing either share and its moldboard in operative connection with a common landside. The invention simplifies the construction of such plows and provides an adjustable beam so arranged that but little strain will be sustained by the handles. The beam is so shaped that large or small sized moldboards can be employed. A turning and locking device for the shares and their moldboards is located within convenient reach from the handle.

### Engineering Improvements.

BOILER.-PERCY W. HANFORD, Oakesdale, Wash. This boiler includes in its construction a vessel having a burner and a regulating-valve controlled by the pressure in the vessel. A water-chamber connected with a water- | The end of the broom-handle which enters the antisupply is located over the burner and is provided with septic-retainer is longitudinally bored slightly above the an opening at the top for the water to pass into the chamber. The opening also serves for the escape of the 'nel thus formed a transverse opening is bored, through vapors. 'The bottom of the chamber is concaved to form | which fresh antiseptic can be fed to the retainer whena combustion-chamber for the burner. The boiler, it is claimed, is a good steam-producer and burns little fuel.

### **Railway Appliances.**

TRAIN AIR-SIGNALING APPARATUS. - JAMES I. TURBUSH, Bronx, New York city. This invention its lower end connected with the partition at the openrelates to air-pressure brakes of the Westinghouse type, ing therein. Below the opening is a fire-pot in the hotand its object is to provide a train air-signaling apparatus, whereby the separate signal-pipe now used is dis- drum partially surrounded by a deflector-plate. The pensed with and the train-pipe and its pressure, as well as the engineer's valve, are made use of to actuate the the stove and other features effectively avoid the collecwhistle and give the desired signals to the engineer by tion of gas. the conductor of the train, no matter what position the engineer's valve is in.

CAR-FENDER. - JOSEPH W. MCKEAN, Charleroi. Penn. The fender is mounted to swing by means of a simple and ingenious mechanism. On the car-axle is a these cards, the preferred rules being described in detail gear-wheel engaged by a movable tooth. The move- in the patent specification. ment of the tooth imparts a positive swinging motion to the fender. The object of the construction is to prevent This invention is an improvement in fire-places which an object on the track from passing under the car-wheels. The arrangement operates automatically.

### Mechanical Devices.

COFFEE MILL. - GEORGE H. DROEGE, Brooklyn, New York city. The coffee-mill is self-measuring, the construction being such that the hopper can be filled in the usual way and that cut-offs can be adjusted to pass through the slots and separate a certain quantity from the bulk of beans, which quantity alone will be ground. The slots mentioned can be so gaged that each division in the hopper will represent enough beans when ground to make a certain number of cups of coffee of average strength.

ROCK-DRILL FORGING AND SHARPENING MACHINE. - WILLIAM J. EVANS, Butte, Mont. A number of dies are adapted to upset and sharpen the cutting edges of a four-winged drill. A drill-supporting device is provided comprising a horizontal guideway on which a carriage is movable. The carriage can be held at different points on the gnideway. A cam-head is held to rock on a pivot-shaft between uprights on the carriage. Handle-arms on the pivot-shaft of the cam-head are adapted by manipulation to rock the cam toward an end of a drill-shank, to feed it up against the impact of the edge-sharpening die.

GRAIN-DRIER. - GEORGE WERNER, Brooklyn, and JOHN H. HILLIKER, Richmond Hill, Queens, New York city. The machine is especially designed for rapidly and thoroughly drying wet grain, such as spent brewer's malt. In the heating chamber of a furnace drums arc mounted to rotate. The drums are alternately inclined in opposite directions and geared together at their converging ends. Boxes are arranged at the ends of the i BREECH-LOADING FIREARM. - FREDERICK and the excellent works on the subject have done much furnace over the projecting ends of the drums. Stirrers are arranged in the drums with their shafts projecting mechanism. WASHING-MACHINE. - PENTON A. HARDWICK, Colorado City, Colo. The purpose of the invention is to improve that class of washing-machines provided with means for introducing steam into the washing-chamber, and so to construct the machine that it can be used for drying feathers or clothes or for dampening clothes for ironing. A tub is employed, provided with a double bot-tom and an outlet and a grating adjacent to the outlet. The outer section of the bottom is eccentric to the inner section. A nozzle leads into the upper portion of the chamber formed by the double bottom of the tub. A double nozzle communicates with this chamber and with the exterior and interior of the tub.

in process of manufacture, the handle-bodies being formed of molten glass, clay, or any suitable plastic material. The employment of the machine facilitates the fect attachment of shanks or screw-stems thereto. The attached parts project axially from the knob-bodies, which is very important and is not the case when ordinary means for attaching the shanks or screw-stems to knobs are employed.

## Miscellaneous Inventions.

CAMP COOKING-STOVE. - WILLIAM C. LANDY, Manhattan, New York city. The invention provides a combined range, cooker, and field-kitchen which simplifies out-door cooking, obviates wastefulness of food and fuel, and tends to minimize danger of scorching. The stove folds up and occupies but a small space and can be readily disconnected. Even the largest size of stove will fit any of the army wagons.

TRUCK .- JOHN MEANEY and JOHN STOEVER, Ridgefield Park, N. J. It is a common objection that it is necessary in the use of hand-trucks first to move the truck up to the object to be carried and then to tilt the object back upon the truck, whereupon the truck itself is thrown downward so as to bear the load. Before the truck can be thus thrown down, it will invariably jump or move backward. The present invention provides a simple attachment for the truck which will prevent this action.

TENT.-THADDEUS D. MCCALL, Wichita, Kans. Mr. McCall has devised a convenient and easily-portable tent for campers, which requires no poles, has a canvas floor, and can be suspended and used as a hammock.

ANTISEPTIC BROOM .- OSCAR S. KULMAN, Savannah, Ga. We have frequently had occasion to notice the various inventions in antiseptic brooms which Mr. Kulman has patented. In this new improvement an antiseptic retainer is inclosed within the wisps of the broom, so that the antiseptic can be fed in sweeping. wrappings of wire. At the upper end of the chanever it may be desired.

HEATING-STOVE.-ATEN B. HOWER, Baker City, Ore. By means of a transverse partition the stove is divided into cold-air and hot-air compartments, the partition being formed with an opening near its lower end. In the cold-air compartment is a fuel magazine having air compartment; and above the fire-pot is a heatingseparation of the fuel-magazine from the heating part of

CARD-GAME.-EDWARD CHRISTIE, Corning, N. Y. The inventor has devised a new card-game which consists of five suits and two extra cards, all designed after an entirely new plan. Various games can be played with

FIRE-PLACE. - NATHANIEL BATES, Dubbs, Miss. are formed in flat plates, sections, or pieces secured together. The fire-place can be quickly and economically constructed, and, if desired, may be incased or inclosed at its back, sides, and upper portion by masonry, brick-parts; acetic acid, 1 part. Dissolve by aid of heat an work, or the like.

CANVAS-STRETCHER .-- ARTHUR F. TAIT, Yonkers, N.Y. The stretcher is extended and positively held in adjusted position through the medium of properly-applied keys. The corners of the stretcher are strengthened and maintained in proper shape. The central por-tion is braced; and the outer members can be expanded at such point in about the same ratio as the corners. A cardboard or strawboard is placed upon the front face of the stretcher, which affords an extended bearing for the canvas and a firm working surface for the artist

FOUNTAIN-PENHOLDER.-SENECA M. and ELMER E. SALISBURY, Aberdeen, S. D. Almost any pen cau be inserted in this holder and can be used as if an ordinary holder were employed, without the annovance of stopping to dip the pen into an ink-well or frequently to fill the reservoir as in the case of an ordinary fountain-pen. The fountain-pen is provided not only with a large reservoir for ink, but also with a convenient means the reservoir may be filled in a cleanly manner and the ink supplied to the nib of the pen.

INKSTAND.-CHARLES W. HAMSHAW, Lamar, Mo. The inkstand comprises a base and an ink-receiver provided with a dip-cup whereby the pen will receive only a proper amount of ink. Hence all the ink in the reservoir can be directed to and used up in the well forming a portion of the receiver. By a special pivotal mounting the receiver can be tilted toward the writer, so that the pen can be handily inked.

HOCHBRUNN, Manhattan, New York city. A controllingcut-off for magazine ring or through the boxes and geared together. Mechanism is being of such construction that it can be turned by the provided for operating the drums and beaters. A hop. fingers to such a position that the cartridges in the magaper discharges into one of the boxes and is provided with | zine will not be affected when the extractor is brought a rotary feed device driven from the stirrer-operating into action. By means of this arrangement the arm while the magazine is filled, can be used as a single leader. When the ring is brought to such a position that it will act upon both the extractor and the cartridges in the magazine, the gun can be used as a simple repeater. The ring is so arranged relatively to the bolt and the extractor, that it is carried out of engagement with the extractor and the cartridges, enabling the bolt to be withdrawn and the magazine replenished without

# Business and Personal.

Marine Iron Works. Chicago. Catalogue free. "U. S." Metal Polish. Indianapolis. Samples free. Yankee Notiona, Waterbury Button Co., Waterb'y, Ct. Book "Dies and Diemaking," \$1, postpaid. J.L.Lucas

Bridgeport, Ct. Send for index sheet. Machine Work of every description. Jobbing and re pairing. The Garvin Machine Co., 141 Varick St., N. Y.

The celebrated "Hornsby-Akroyd" Patent Safety O Engine is built by the De La Vergne Refrigerating Mi chine Company. Foot of East 138th Street, New York.

The best book for electricians and beginners in electricians tricity is "Experimental Science," by Geo. M. Hopkin By mail, \$4. Munn & Co., publishers, 361 Broadway, N. J

Mexican Government Contracts, Concessions, Rail ways, Lands, Mines, Patents, etc. Address Ernest Chavero, Attorney at Law, Member of the Mexica Federal Congress. 3d Colon 1020, P. O. Box 149, Mexic City, Mexico

(29" Send for new and complete catalogue of Scientifi and other Books for sale by Munn & Co., 361 Broadway New York. Free on application.



# HINTS TO CORRESPONDENTS.

Names and Address must accompany all letter

Names and Address must accompany all letters or no attention will be paid thereto. This is for our information and not for publication.
 References to former articles or answers should give date of paper and page or number of question, inquiries not answered in reasonable time should be repeated; correspondents will bear in mind that some answers require not a hitle research, and, though we endeavor to reply to all either by letter or in this department, each must take his turn.
 Buyers wishing to purchase any article not advertised in our columns will be furnished with addresses of houses manufacturing or carrying the same.
 Special Written Information on matters of personal rather than general interest cannot be expected without remuneration.
 Scientific American Supplements referred to may be had at the office. Price 10 cents each.
 Buoks referred to promptly supplied on receipt of price.

Minerals sent for examination should be distinctl marked or labeled.

(7987) F. W. Q. writes: A few month ago, I read an account in the SCIENTIFIC AMERICA SUPPLEMENT about renewing dry batteries by puttin holes in the cell and immersing it in acidulated water Would you please inform me the name of the acid an how proportion it with water ? A. To renew a dry ce by the method referred to, pour one part of sulphnri acid into ten parts of water. Punch many holes in th outer coating of the dry cell as directed in the note re ferred to. When the liquid becomes cold, put it into an convenient glass or earthen jar, and place the prepare dry cell in the jar, so that the top stands out of the liqui about one inch. You now have a wet cell in place the worn-out dry one, which will run till the acid has di solved the zinc of the dry cell. 'This is the renewing of a dry cell. It changes the dry into a wet cell.

(7988) E. M. S. asks: Wll you pleas send me the recipe for making the glue used on the back

add 1 part of 90 per cent alcohol.

(7989) W. G. asks: Will you pleas tell me if there is anything flexible that electricity wi not burn ? A. Asbestos.

### NEW BOOKS, ETC.

MEMOIRS OF HAYWARD AUGUSTUS HAR VEY. By His Sons. New York Printed for Thomas W. Harvey, M. D. Orange, N. J. 1900. 12mo. Pp. 98

The late Mr. Harvey was a typical inventor, and on th occasion of his death we published an elaborate biograph ical notice. The present memoirs compiled by his so give a thoroughly adequate idea of Mr. Harvey's epocl making inventions. In addition to his process of trea ing armor plate, he also made many highly important inventions for making screws, spikes, wire nails, washer etc. In all, Mr. Harvey had issued to him since 185 seventy-eight patents, which is a most excellent recor The book is admirably written.

METHODS IN THE ART OF TAXIDERMY By Oliver Davie. Philadelphia David McKay. Pp. 359, 90 full pag engravings. Price \$2.50.

The work is very fully illustrated by engravings which vary a good deal in quality. There is hardly a branch natural history which is more interesting than taxider to aid taxidermists. Mr. Davie's book is a good one an

e-	AND EACH					
: Dil	[See note at end or				-	-
a.	Air brake, J. E. No Amalgamator, T. E Ambulance, bicycli Anchor setting too Ankle brace, A. J. J. Armatures, shaped Atmospheric burne Automatic gate, ti. Azle box and axle Balancing engine o Baling press, J. S. ' Baling press band t Hunt.	mand Hick Hick		••••		660,650 660,774 660,769
ю- 18.	Anchor setting too Ankle brace, A. J. J.	i, J. T. z R. T	. Swart . Braue	z	Rothert	660,667 660,885 660,659
¥.	Atmospheric burne Automatic gate, (3.	r. T. E. Ri	J. Litle	, Jr		
il-   to	Balancing engine o Baling press, J. S.	conne r moto Futtle	or, G. L	W. H. M . V. Ch	auveau.	660.965 660.679 660,671
an co	Baling press band t Hunt Ball See Tether b	ying 1	nechar	ism, K	ennedy	& 661,015
fic	Hunt Ball. See Tether b Band cutter and fe Bandage, G. Voelln Banjo bridge, F. B. Battery. See Elect Baoring, adjustable	an. eder, ' er	r. Ellio	tt		660.632 660.874
у,	Banjo bridge, F. B. Battery. See Elect Bearing. adjustable	Hami rogal J. V	mann vanic b Vhite	attery.		660,953 660.743
-	Bed bottom, spring Beebive bar frame,	T.J. W.H	Ander Iorner	80n		660,745 660,574
	Belt retainer, F. H. Belt shifter and tig	Houghtene	hton r, B. G	. Luthe	r	660.990 661.018
j	Belt shifter, autom Bicycle, N. M. Barn Bicycle, J. E. Ruby	atic, I	P. W. F	ryer.		660,682 660,981 . 660,971
	Bicycle brake, H. H Bicycle guard, J. & Bicycle handle bar	G. W	ambaci Justen	b		
-	Batfery. See Klect Bearing, adjustable Bed bottom, spring Boehive bar frame, Pelt, diagnosing, F Belt retianer, F. H. Belt shifter and tig Belt shifter and tig Belt shifter and the Bicycle, N. M. Barr, Bicycle bake, H. E Bicycle bandle bar. Bicycle tender, C. 1 Bicycle tender, C. 1 Bicycle stender, C. 1 Bicycle stender, St.	I. Sto gage	nebrid carrier	for, 1	4. Baue	660,598 F, 660,616
re ur	Binding, brush skin Bit., See Bridle bit	t, A.	<b>W.</b> Sto	ekley		660,663
ld	Billaing, brush skill Bilt. See Bridle bit Boiler. See Locom Boiler, P. Cunning, Boiler attachment, Boiler flue, E. Seyf. Boiler furnace, J. A Bolt. See Expansi Book account A	bam C. Ph	illips	Steam	bouer.	660,751 660.690
n. Id	Boiler flue, E. Seyf: Boiler furnace, J. A Bolt. See Expansi	arth A. Stev	ens	•••••		$     660.761 \\     660,661 $
at d, e <b>r</b>	Dook, account, A.	LA Dad				
cđ	Box signatures, di mann Box. See File bo Musical box. S Box cover, cigar or Box lid support and Knowles Brace See Ankles	x. Le alve b	tter b	ox. Ma	tch bo	£.
of	Box cover, cigar or Box lid support and Knowles	otner 1 tag	holder	combi	ned, J. I	660,858 1. 660,854
of be	Brace. See Ankle Brake. See Air bra brake. Vehicle Brake, C. W. Marti Brake operating n	brace.	Bicycle	brake.	Car trac	:k
ed	Brake, C. W. Martin Brake operating 1	nas necha	nism,	J. E.	Norman	660,964 ], 7 660 648
of lv	Brick kiln, E. Aber Bridge, M. Waddel	į			000,64	7, 660,648 660,880 660,827
] <b>y</b>	Brush blank holdin Brush, comb. A. R.	n g dev Durg	ice, W.	C. Rea	d	
าร	Brush, tooth, D. J. Bung, barrel, F. W	Arch Ping	er gel	1 M P		660,677 3, 660,654 660,658
ng	Burial apparatus, J Burial case machin	. Carl	art L. Key	2. 51. K		660.947 660,642
er.	Butter, etc., appara E. Webb	spher itus fo	or mak	er. Ga ing mo	lds of, I	R. . 660,939
nd ell	Brake operating i Brick kiln, E. Aber Bridze, M. Waddel Bridze, M. Waddel Bridze, M. Waddel Brush Joank holdin Brush, comb, A. B. Brush, coch, D. J. Bung, barrel, F. W Buoying means for Burial case machin Burner. See Atmos Butter, etc., appare E. Webb Button, D. A. Carp Caloric engine, J. T Can, See Sheet mc Candle holder, M. J Candleetick and cor F. Herbs	ine, st . Nico	riped, lson	Barher		e, 660,619 r. 660,717 660,996
ric he	Can, See Sheet me Candle holder, M. I Candlestick and cor	tal ca Hagen	n.	lemen	t miner'	. 660,899
re- ny	F. Herbst Candy machine, T. Car buffer, street. 1 Car coupling, J. Ke Car coupling, W. S. Car coupling, W. S. Car coupling, C. Sci Car door fastener	J. Jer	ikins	Dalma	·····	660,573 660,901
ed id	Car buffer, street. I Car coupling, J. Ke	P. M. 1 lso	kling			
of is-	Car coupling, W. M. Car coupling, W. S. Car coupling, C. Sci	Ower	way			660,652 661,002
of	Car door fastener, Car door, grain, J. Car fender, street.	Pries d Clarke H. Fu	& Meye	er		660,656 660,949 660,565
se	Car fender, trolley, Car loader, H. P. H	L. Ma arpst	idas rite			660,779 660,636 
ks	Car seat foot rest, Car track brake, ra	ŵ. M. ilway,	Norcro Lowe	088. & Meigl	nan	660,733 660,645
, 5 nd	Cars, etc., supporti Carbon, manufactu	ng str ring,	ap for. H. Wa	L T.Y	oder g	660,958 660,610 660,693
se	Carbonating appara Carpet stretcher, L Case. See Sterilizi	tus, l . M. L ng cas	iquid, . ownes. e	A. Wall		660.740 660,707
ill	Case and chair, con Chain and wheel th Chain, sheet metal	abineo erefo F. E.	i, H. Fl r, drive Vande	anders J.C.I rcook	Pratt	660,989 661,021 660,605
	Chain tightener, H Chair. See Infant Chair. E. E. Koken	. Gree s chai	r.	•••••	••••	
	Chalk line holder, Chimney cowl, J. C.	J. A. V larkso	Vernon			660,672 660,888 660,865
R- k,	Cleaner. See Siev Cleaning and paint	e clear	treati	ube cleang surf	aner. aces su	b-
8.	Clod crusher, J. Sc Clutch, fluid, P. Cu	nning	ham	••••••		660,975 660,749
he	Coat, apparel, F. G. Cock or faucet, self	Dods f closi	r hon ng, F. 1	H. Stahl		661,001 660,985 661,003
h- on	Coffee, preserving Coffee, ripening, '1', Coffin handle, M. G	R. Ti	d, S. Fe mby eler	eitler		
h- at-	Coin controlled att Collar and necktie	achme faster	ent, F. ler, H.	P. Cox. B. Barn	168	660,810 660,882 660,612
nt rs,	Compressor, single Confectionery depo	cy line	ler con mach	npound ine, G. (	1'. Gran	nt 660,793
159 d.	Car coupling. J. Ke Gar coupling. J. Ke Gar coupling. W. S. Car coupling, W. S. Car coupling, C. Sci Car door fastener, Car door, grain, J. J. Car fender, striet, Uar fender, striet, Car track brake, ra Car track brake, ra Carbonating appar Carbonating appar Chain and wbeel th Chain, sheet metal Chain is ee Infant Chair. See Sterliji Case. See Sterliji Case. See Sterliji Case, See Sterliji Chain sparel, F. G. Cottach, fluid, P. Cu Collar and necktie Conmeutator truing Conversing and necktie Conneotrolied att Collar and necktie Connest, Sie Car Conveying and e Form sbredder, F. 1 Cotton gins, metal Coupling. See Car Crusher, See Car Car See San Coulivator, A. Tap Cultivator, Isted c	etko E. Ju	rgens.	aratus,	electri	660.724 660,991
	Copper, gold, or si ing, Conner & F Corn sbredder, F. I	agby lagen	uarden (rejssi	ug an ię)	u tempe	660,983 11,866
Y. a:	Coupling. See Car Crusher. See Clod	coupl crush	ing. P er.	ј. н. Ј ipe cou	enkins pling.	060,900
ze	Cultivator, A. Tap Cultivator, listed c Current generator	lin orn, E , singl	F Cb	eney e alter	nating 1	660,669 660,698 B.
ch	G. Lamme Cutter. See Band	i cut	ter. Pi	pe cut	ter. Soa	660,907 .p
of ny	Damper and spar	к агг	ester,	compin	eu, r.	r
ch	Decorating, mecha	nical e	wheeleng. H.	Bauern	or. Hall. neister	660,952 660,714 660,943
nd ib.	Denvely medians, p Digger. See Post Disb washer, F. S. Draught arm, dout	nole d Hogg. de stra	eam	Potato Armer	digger.	660.703 660,735
;1						
n n	T. Lee Drilling machine. Driving mechanism Dumb bell and Ind nedy.	n. P. C ian ch	unning 16, con	ham bined,	D. J. Ke	660,750 n- 660.962
р.	Dye, blue sulfur, H	I. Gus	smann.	down be	*******	. 660,770
ery ew	Electric conduits, a connections bet Electric contact de	applia ween	nce for Watk	makin ins & L	g metall	660,979 ic 660,741
ed gi-	Electric currents,	mplif	ying, J	. B. Bal	cer	. 660,613
g1- [n-	Electric distribution Electric indicator, Electric motor. R	n 858 C. L. ( G. La	tem. E. Clarke. mme	м. Не	wiett	660.815 660,561 660.909
I.	Electric motor. T. Electric motor, van Electric snap switt	S. Wa iable	tson speed, er. M	B. G. L Guett	amme	
Зy	Electric switch, C. Electrical conduct	H. No	orth	active 1	engths o	660,818 f,
n. 0.	Electric distribution Electric indicator, B. Electric motor, B. Electric motor, T. Electric snap switch Electric switch, C. Electrical conduct C. F. Scott Electrical switch, J. Electrical switch, J.	ion sy	snap, 1	B.G.L. M.Guet	imme	660,910 660,634
sce	Electrical switch, i Electricity meter, Electrode, arc lam Electrogalvanic ba Elevator emergence Engines. etc., fuel plosive A Hay	p, F. I ttery,	Iachma H.J. I	nn Frewer.		660.852 . 660.836
'he	Elevator emergeno Engines. etc., fuel plosive. A. Hav	y stor vapor es	o or bra vizer ar	ke, I.F id mix	rankel er for e	660,851 x- 660,954
оц- Ш-	plosive, A. Hay Engines, mixer and bert Engines, sparking					660.778
ell	[ 8all			puge S	· · · · · · · · · ·	660,786

DEVICE FOR FIXING SHANKS OR SCREW-STEMS IN HANDLE-KNOBS OR PICTURE HANG-ING NAILS.-SERAPHIN KRIBS, Brooklyn, New York screws of handle knobs and picture-hanging nails while of this paper.

#### Designs.

BREAD-BOARD -ISRAEL S THOMPSON, Ashland Wis. The board has a rim extending above its top and below its bottom, so that it can be used for making bread on both sides.

Note.-Copies of any of these patents can be fur nished by Munn & Co. for ten cents each. Please state tion to technical literature. It is well illustrated by con city. This device holds in proper position the shanks or the name of the patentee, title of the invention, and date prehensive engravings. The entire subject is we

### shows an extensive practical acquaintance with the su ject. The methods are modern and American.

STEAM ENGINE INDICATOR By Cec Peabody. New York: Joh Wiley & Sons. 1900. 12mo. 153. Price \$1 50. P

The number of books upon the indicator is already ver large, but there always seems to be room for a ne treatise on this subject. The author is admirably fitte for his task, as he has the professorship of marineeng neering and naval architecture at the Massachusetts I stitute of Technology. The book is an excellent one.

MOULDERS' TEXT BOOK. Being Part I of American Foundry Practice. B Thomas D. West. Eighth Edition New York: John Wiley & Sons. 1900 12mo. Pp. 461. Price \$2 50.

The true test of the value of a technical book is to s whether it can run through a number of editions. T volume before us is certainly a most valuable contrib treated.