recently patented inventions. Electrical Devices.
adjustable Electric-Light sup-PORT.-E. E. Walters, Lehighton, Pa. The support comprises a number of tubes adapted to telescope within each other as the lamp
is raised. The electric lamp is attached to is raised. The electric lamp is attached to
the bottom of the innermost tube. The conthe bottom of the innermost tube. The con-
ducting wires pass up through the tubes and are coiled up on a spool at the top of the support, the ends of the wires passing down through the body of the spool to the core,
whence, by frictional connection, they rewhence, by frictional connection, they re-
ceive electric current from the two other conductors. The spool is rotated by a coili-spring, to take up all slack wire when the lamp is raised. Thumb nuts are employed to lock the spool and hold the lamp at any desired
height.
ELectric call.-J. Salmon New York, N. Y. The invention is designed for use in hotels, to awaken guests at any desired time. Each room is provided with a bell, which may be so connected to a clock as to ring at
any predetermined hour. A clapper, operated by the clock, makes connection with a battery, which runs a small motor, and rings a bell
until the motor automatically shuts off the until the

## Games.

GAME APPARATUS.-D. Smitir, Griffin Corners, N. Y. The game apparatus constifolding table, so that it may be conveniently employed in any room of a dwelling. The
balls are thrown by a spring-actuated plunger, and return by gravity along grooves at each side of the alley
DESIGN FOR GAME-BOARD.-F. B. Hollister, Mount Morris, N. Y. 「he design con-
sists of a star-shaped board divided into sists of a star-shaped board divided into
squares. The squares in the several corners squares. The squares in the several corners
are provided with distinguishing marks. An with a distinguishing mark.

## Mechanical Devices.

MUSIC-LEAF TURNER.-C. H. DASCOMb, Ei Paso, Tex. A base is employed which may be supporte At its upper side the base organ or piano. At its upper side the base
is adapted to receive a book or sheet-music. Bars, pivoted at each end of the base, are used for clamping back the covers of the
book. A series of bars are pivoted at the book. A series of bars are pivoted at the
center of the base, and have mounted on their outer ends, the carriers, consisting of pairs of wire bows between which the sheets of music are clamped. Each carrier bar is
controlled by a button, so that when a but controlled by a button, so that when a but
ton is pressed in. the corresponding carrier is actuated, by rack and gear, to swing on its pivot and turn the page of the
the sheet of music which it carries.
AUTOMATIC CUT-OFF FOR MILL POWER.-B. Strittmatter, Carroll Township
Pa. This device is particularly adapted fo Pa. This device is particularly adapted for
connection with so-called air-motor-power wind mills, and automatically cuts off the power
when the grain to be ground becomes low, or mills, and automatica ground becomes low, or
when the grain to be
nearly discharged from the hopper. A paddle nearly discharged from the hopper. A paddle
is hinged to the bottom of the hopper, and is held down thereto by the weight of the grain paddle, relleved of its weight, swings upwaird clutch and stops the mill.
ORE CONCENTRATOR. - $W$. Churmond Hlilisboro, N. M. A draft-chamber is employed, opening at one end into a suction-box An inclined wire screen is situated under An inclined wire screen is situated under to rock on suitable rollers. The meshes of
the netting increase in coarseness toward the bottom of the screen. Beaters are used along the under surface of the screen, to assist in sifting out the ore. The material moves by gravity down the screen, the lighter particles passing through into the draft chamber and be-
ing blown over a screen plate which further sifts them out. All that remains on either the wire screen or the screen plate, is drawn into acles. The heavier particles drop immediately into the first receptacle and are conveyed, The remainder, which enters the other recept acle, is carried out to the dump.
CLARIFIER.-L. Litty, Donaldsonville,
La. The invention is an improvement on La. The invention is an improvement on
apparatus for automatically clarifying the julce of sugar-cane, beet sugar, etc. The juice is poured, through a pipe, into a tank
divided into two compartments. At the botpipes which heat the liquid. The exhaus pipes which heat the liquid. The exhaust
steam from the coils operates a motor which imparts motion to a paddle. The paddle drives the scum over to an endless conveyor above. The screen drains out whatever liquid
may have been carrled up with the scum.

## Tools.

MiCROMETER GAGE. - J. Stromberg, Phœonix, Ariz. Ordinarily micrometer gages with a range of one inch only. In this mi
crometer, by the use of extension-rods, a
single instrument may accurately measure
any length desired. The extension-rods are secured by suitable means to the measuring screw. Means are also provided for adjusting
the anvil, in order to insure accuracy of the gage.
SCREW DRIVER.-T. A. Farrell, Chi-
cago, III. The invention has for its primary cago, III. The invention has for its primary
object the provision of improved means for object the provision of improved means for
holding a screw firmly in engagement with a driver spindle. The holding means rotates with the driver whie linserting the scre the driver may force the screw home into the work. A simple and effective means is employed for locking the screw holder to the driver
same.
DRILL.-R. Binnie, Bolivar, Pa. Two patents have been granted to Mr. Binnie for improved drills adapted for work in coal, clay, and other soft minerals. In the first inven-
tion the drill is mounted on posts. The drill rod is driven by a combined rotary and reciprocal movement, and at the same time is
gradually fed forward to its work. gradually fed forward to its work. This
movement adapts it to a bit of any charmovement adapts it to a bit of any char-
acter, either a boring-tool or a chiseling tool. For if an ore ball or lump is struck, the bor
ing need not be abandoned, but the chiseling tool may be applied and the work carried on
as before. In the second invention, the drill as before. In the second invention, the drill
is mounted on a tripod in such a way as to work against a bank of any possible disposition. Improvements are also made in the
forward feeding device. forward feeding device.
TACK OR NAIL PULLER.-E. HanNEr, Ridgway, Pa. The tool consists of a body or handle portion in which is mounted the
tack-puller proper. The latter consists of a tack-puller proper. The latter consists of a
lever, terminating in a head block from which the claw foot projects. The head block rests on rollers, and has trunnions which are
adapted to turn in the slots in the side walls of the handle portion. These parts mutually coact to give an initial forward movement to the claw, and afford a vertical pull after the
claw has passed under the head of the tack.

## Miscellaneous Inventions.

Loose-Leaf ledger.-Almon b. Wells. 515 L Street, N. W., Washington, D. C. The
invention relates to that class of blankbooks in which any leaf in the book can be removed and another substituted. The invention is an
improvement in this class of devices, which is mprovement in this class of devices, which is which is so constructed as to permit the leaves of the book when opened to lie flat in a convenient position for the accountant, instead of
bending with an awkward curve in the middle bending with an awkward curve in the middle. CIGAR.-J. D. Tynen, Spooner, Wis. A cigar loses much of its strength and flavor
by exposure to the atmosphere. This cigar is made with two tobacco wrappers wound re versely to each other. The outer wrapper is of no value for smoking, but is of special value signed to be taken off and cast away before the cigar is smoked.
BASKET.-T: J.
The invention consists laston, Johnston, S. C The invention consists of a folding basket in
which the body portion is supported by frame, so that it can be extended for use, and
compactly folded with the frame when not in comp
TREE SUPPORT.-T. P. BRown, Riverside,
Cal. The invention relates to means for supCal. The invention relates to means for supporting the heavy fruit-laden limbs of trees.
A straight prop-pole is used, to which a number A straight prop-pole is used, to which a number
of hanger-strands are secured. Bracket-hooks are placed under the limbs and slid up the hooks are secured by a simple clamp.
ANIMAL TIE.-J. T. Horris, New York, N. Y. The tie is designed particularly for perfect freedom when standing up or lying down, with no danger of its becoming tangled up in the tying device. A carriage is mounted to slide on a vertical guideway at
the side of the stall, and to this the halter the side of the stall,
BED.-W. D. Olney, Stillwater, Minn. Tai bed proper is capable of being folded up into cabinet. A counterweight is employed to
raise the bed. This is thrown out of oper:t aise the bed. This is thrown out of operab
tion by drawing the cot away from the cabnet. When it is desired to close the bed M MITTEN.-W. L. Pollard, Rozetta, Iil.
The mitten is especially adapted for use in The mitten is especially adapted for use in
husking corn. It is economically designed and constructed with no seam between the palm and thumb.
PORTABLE DARK-ROOM.-ALbERT WER-dark-room consists of a box to which is hinged a cover provided with a pane of red or orange glass. By means of two flexible sleeves at-
tached to the box, the operator may pass his hands thereln and manipulate his plates. Suit able devices insure a constant supply of fresh air, and enable the photographer to tem
porarily withdraw from the main box, without porarily withdraw from the main box, without
danger of light striking a plate in the process of developing.
blasting fúse.-N. Harris and J. Rray, Russell Gulch. Col. The fuse differs
from the ordinary in having branching combustible members spaced at intervals along the
cord. These members when not used can
ject is to permit the fuse to be readily ignited, and any desired length can be put bet gniting point and the detonating cap.
rotary furnace. - Charles groll 126 Rue du Grand Chemin, Roubaix, France The grate is formed by a series of independent bars curved in the form of an arc of a circle
and arranged concentrically. These bars rest and a rranged concentrically. These bars rest on a secies of radial free to expand on the heel a cieces a their outer ends. Each curved bar is pro
vided with a narrow notch which receives a radical bar snugly therein. , It is also provided with wide notches which receive the other radial bars, thus permitting free expansion The grate is operated by a rack and gear.
PROTECTING ATTACHMENT FOR LEGS of TROUSERS.-B. F. Salmon, Freeland, Pa The invention is designed particularly for the ase of miners and consists of a waterproof ap-piece which is sewed to the trouser-logs,
and is adapted to cover the knees and close the op of the boot.
PROCESS FOR PRESERVING WOOD.B. Sprague, Everett, Wash. Iron naits,
which have been rusted by being laid in a salt solution, are driven into the wood about two inches apart all around. Iron filings are then pressed into the wood and rusted by a
salt solution. This gives the wood a hard salt solution. This gives the wood a hard
gritty coating which preserves it and protccts against the distructive action of teredoes. PADLOC K.-J. J. Cotrer. Bowerston,
Ohio. This invention provides a lock-casing Ohio. This invention provides a lock-casing
so constructed as to prevent so constructed as to prevent the entrance
of water, thus obviating any danger of ice of water, thus obviating any danger of ice
forming in the lock in cold weather, which would interfere with the working parts. In is provided for the tumblers, which prevent picking the lock.
Crate.-A. Von Schluembach, Martinsburg, Pa. The crate, which is especially
dapted $1 \approx$ carrying live fowls, may be folded when empty so as to occupy a very much re duced space, thus facilitating its transporta-
tion. A water-trough of canvas, or other tion. A water-trough of canvas, or other
waterproof fabric may be employed at one end of the crate.
SECTIONAL CULVERT.-F. A. SICKle STEEL, Northbranch, Mich. The invention
provides an improved sectional culvert de signed for use on highways and railways, and is arranged to be conveniently set up without the aid of skilled labor. It consists essential ly of a base, and sectional arched side pieces seated at their lower edges in the base. The upper edges of the side pieces are serrated,
and have alternately-disposed bevels which interlock with each other.
CHEESE-BOX.-W. A. Simister, Inger soll, Canada. This improved cheese-box is constructed to prevent ripping or splitting of the box. It is so arranged that both heads can be removed, to allow of readily placing the cheese in the box. The heads are so removed, to allow inspection from either end without destroying the box or injuring the cheese.
Cash-box.-J. J. Peetz, Galveston, Tex. The cash-box comprises a box proper having a glass front. A chute, for receiving coins,
projects through the upper portion of the box and is curved, so as to prevent the possibility of extracting the coin. A trap door covers the end of this chute, which will open under the weight of the coin. The box is divided, by a false bottom at its center, into two compartments. The false bottom has two hinged doors, which open downward under
the weight of the coins, and permit the latter the weight of the coins, and permit the latter
to drop into a cash drawer. The box also contains a cash register, which is operated by a crank-handle at the side.

FOLDING COMMODE STAND AND SEAT -J. H. Preyrice, Brooklyn, N. Y. This comuse of children, may be conveniently carried from place to place in the form of a small parcel, or may be packed in a medium-sized traveling bag. It consists of but three parts, a seat, and two folding supports which are utilized as upright side members. The hole in
the seat is beveled on both faces, so that it the seat is beveled on both faces, so that it opening therein.

Pipe-collar.-E. J. Mallen, New York, N. Y. This improved collar or ceiling-plate has been designed for use on steam pipes and
is meant to cover openings in the ceilings or floors, through which they pass. The opening is covered by a plate which snugly fits the pipe, and is held in place by spiral springs wound around guide rods. These rods project
through the plate at one end, and at the through the plate at one end, and at the
other end are secured to L-shaped arms which other end are secured to L-shaped
are fastened to the pipe by a clip.

PROCESS FOR TREATING MATERIALS TO MAKE THMM WATERPROOF.-A. H. Hipple, Omaha, Neb. The invention is process for rendering asbestos waterproo twelve of sulphur are used for every one hundred parts of asbestos. The mass is then vulcanized at a temperature of 300 deg. $F$. for two hours.
Note.-Copies of any of these patents will be Please state the name of the patentee title of Please state the name of the patente
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sary to give the number or the inquiry. MUNN \& CO.

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Inquiry No. 225s.-For dealersin electro-magnets
nd castings.
Water wheels. Alcott \& Co., Mt. Holly, n. J. Inquiry No. 225:3.-For a second-hand or slightly
Stencil Machines.-A.J. Bradley, 101 Beekman St. N.Y. Inquiny No. 2ista.-For makers of gasoline en-
ine castings for 4utomobiles. Handle \& Spoke Mchy. Ober Mfg. Co., 10 Bell St.,

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burners for cookink and heating stoves. Sawmill machinery and outfits manufactured by the Inquiry No. 2.256. -For makers of hinges and
atches for fancy boxes. Rigs that Run. Hydrocarbon system. Write St.
Louis Motor Carriage Co., St. Louis, Mo. Inquiry No. 22.57.-For a portable band sawmill
and a portable ensine for running the same. Are you looking for anything in bent woodwork? Inquiry No. 2258.-For manufacturers of port-
ble houses. Gear Cutting of every description accurately done.
The Garvin Machine Co., 149Varick, cor. Spring Sts., N.Y. Inquiry No. Nows.-. For manufacturers of comWe develop inventions through their several stages,
nanufacturing for the market. Amstutz Osborn Co.,

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2Vers and
grinders. .-For makers of paint mills, For SALe.-Lately patented "necktie fastener,", a
meritorious article. Address Ernst Kiene, Box 1029, Seritorious artic
Inquiry No. 2y261. For plated brass like that
used on lead pencils. Have a few thousand dollars to invest in manufac-
uring a good selling article. E. C. Hart \& Company, Inquiry No. 2262.-For a second-hand platform
freight elevator and a tumbler in which to clean cast-
inge. Manufacturers of patent articles, dies, stamping
tools. light machinery. Quadriaa Manufacturing Comany,
Inquiry No. Pas 263.-For dealers in aluminium
bronze or gold bronze in sheets. Manufacturing plant for sale at a baragain. Large
tone buildings, excellent watcr power, Corliss engine, land. Hansford Button, Seneca Falls, N. Y.
Inquiry No. 2264.-For manufacturers of rice. WANTED. - To manufacture special parts of maWANTED. - To manufacture special parts of ma-
chines, or anything that can be done chiefly on the
lathe. Geo. W. McKenzie. Win
 Designers and builders of automatic and special machines of all kinds. Inventions perfected. The W. Inquiry No. 2:266.-For manufacturers of electric Competent draftsman familiar with steam plant work

Inguiry No. 2267.-For manufacturers of "Amo
The celebrated "Hornsoy-Akroyd" Patent Safety Oil Engine is built by the De La Vergne Refrigerating Ma-
chine Company. Foot of East $138 t h$ Street, New York. Inquiry No. 226tic. - For
shot or pearl beads in strips.
Wanted.-Sole agency, Pacifc
Have capital. Box 856 , Fresno, Cal.
Inquiry No. 2869.-For manufacturers of a ma-
chinefor making asbestos pulp.
Wanted.-Foundry chemist who can also superintend cupolas and produce iron at lowest cost. Younk port, Md.
Inquiry No. 292 0.-For prices and particulars of
the White electric plant manufactured by the Globe
Iron Works Company. Wanted-Revolutionary Documents, Autograph Let-
eers, Journals, Prints, Washington Portraits, Early Nas, Journals, Prints, Washington Portraits, Early
American Illustrated Magazines. Correspondence SoliInquily No. 22y1.-For manufacturersof lyundry
and renovating machinery. Business man having best knowledge of European
trade will undertake to sell patents, rights, licenses, etc., on commission. Will act as agent for first-clas rms. Adres
for woodwork. $\mathbf{2 2 7}$ 2.-For manufacturers of planers Those using now Duplicators or desiring to reproduce many copies of writing-all alike-do well to state
heir needs to the original inventors of the latest multicopiers. s. C. Bensinger, Manager, 265 Broadway, N. Y. Inquiry No. P273.-For hand looms for makiug Wanted.-Draftsman of first-class skill wanted in
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supuftenden, or assistant superintendent, of a manufacturing plant (new or old), one where trouble in handliug men. his knowledge of mills, their construction, repairs and maintenance, his practical chemistry, in short. Where his 15 years' experience in mills be of mutual value; is still willing to learn ; best
of references. X. Y. Z., Box 773 , Scientific American Office, New York.
Inquiry
machinery.
" Inquiry No. 2978. Fin Aligator Wrench." the manufacturers of the
Inquiry No. N279.-For machinesto cut and finish
slats for Venetian blinds of about 88 inches wide. Inquiry No. 2280.-For dealers in the Phillips
Morse Automatic Telegraph. Inquiry No. 2:281.-For makers of castings for Jnquing
cial indigo. No. 2282.-For dealers in Java and artifiJnquiry No. 2283.-For a machine for printing linquiry
knituing machines. 2884. -For dealers in weaving and Ing tools. No. 2285.-For dealers in manual trainInquir.y No. 2286.-For soap molds, etc, for mak.
ing soap. Inquiry No. 228\%.-For manufacturers of refrig

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Alkaline alginates.


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Calculating machine, F. F. Lleishman.
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Clark metal mold for forming, $\underset{\text { W }}{ }$. Cement clinker or other granular materials,
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Cement gravel crusher and separatorc, C. H.
 Chair truck, R. \& F. E. Bige
Chimney cap, C. J. Quinn.
Chlorin and alkailine
cally, production of, hydrates electroiyt
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Chute, W. L. Mce Mabe...........
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Clamping device, H.





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Engine

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Explosive engie, W. Favis...
Explosive fiuids, apparatus

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## Bospop



## ${ }^{\text {F. }}$



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| 695,364 |}



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694,950

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## DESIGNS.



| ntiblennorrhagic, H. S. Clark. ${ }_{\text {stamach }}^{\text {Munyon's }}$ tters, stomach, Munyon's H Home Remedy Co........... |  |
| :---: | :---: |
| ots and shoes, Fri |  |
| Brushes, Elder \& J |  |
| Butter, ChapinSacks Mfg. Co............. |  |
| ains and parts thereof and atta therefor, ornamental, O. M. Dra |  |
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