Distance register, electric, E. R. E. Cowell.
Dolls head, C. C. Johnson............... Door securer, adjustable, J............
Draught equalizer, M. w. Tucker. Draught equalizer, M. W.
Drawer pul, C. A. Bailey.
Dress waist protector, s. E. E. Herve.......
Drill. See Portable drill. Rock drill.
Drying kiln, o. Moore....
Dust pan, A. M. H. Moss.
Dust pan, A. M. H. Moss......
Edging machine, A. Williams
Eqg carrier. C. D. Lewis ..............................
Electric machine, dynamo, V. w. Blanchard Electric machine, dynamo, Harling \& Hart
Electric machine, dynamo, P. Jablochkoff..
Electric machine, dynamo. G. A. Scheeffer.
Electrical currents, metallic circuit for, S. . D.
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 Electro therapeutic apparatus, J. W. See............. 267, levator. See Hod elevator.
Engine. See Rotary engine. Rotarysteam en
Envelope letter sheet, A. C. Fletcher
Excelsior machine, H. R. Mathias
Faucet, E. F. Pierce.... ...... ..
Feeder, boiler, G. II. Whitman..
Fence, IV. Gleason...............
Gile, paper, H. H. Blake..
Filtering and extracting machin
Filtering funnel, H. Bell .........
Firearm, magazine, J. Schulhof
Firearm, magazine, J. Sc
Fire escape, Roberts \& Palmer.
Fire escape, A. Van Wagner.. .
Fire escape ladder, P. H. Spelm
Fire extinguisher, automatic, t. Grinnell our manufacture of, F. Prin Flour mills, etc., dust collector for, W. H. Fruen,
Flour mills, etc., dust collector for, w. H. Fruen
Flower pot or vase, self-irrigating, E. Wilder...
Fruit drier. A. W. Walker. .....
Fuel, artificial, C. H. Coggeshall
Funnel trap for sinks, J. G. Schil
Furnace. G. B. Field
Furnace for melting glass, etc., M. …....... surnaces, apparatus for feeding shaving
steam boiler and other, L. P. Conklin. Gauge. See Saw table gauge.
gate - Water whee
Gate and railing, S. R. Evans
Gold and siver ores. apparat
ing, W. ... Harris. ......
Gong. street car, C. T. Brown.
Gong, street car, C. T. Brown....
Grain binder, Steward \& Dixon.
Grain binder knot-tying device,
Grain cleaner, L. Gathmann.
Grain cleaning and separating machine,

W. Justi...

Grain separator, W. U. Richmon
Grain separator, w.
Grate. J. C. Bara
Grate bar, H. Adams
Gun, air, L. D. Shaw
Hame, C. Seibert
Hame strap loop, C. H. Alle
Handle. See Tool handle.
Hanger. See Sbafting hange
Harness pant E. P. Waters
Harrow, L. S. Wheeler....
Harrow, L. S. Wheeler.....
Harrow tooth, A. M. Forres
Harrow tooth, A. M. Forrester.......................
Hay rake, revolving, R. W. Ray
Hay rake. sulky, W. $P$.
Hay rake. sulky, W. P. Pral
Heater. See Water heater.
Hod elevator, F. Pierce....
der. See Bell holder. Candle holder. Cigar
holder. Label holder. Lead and crayon
holder. Package holder. Rein holder.
holder. Package holder. Kein holder
Hook. See Swivel hook.
Hoorse rake, Wertz \& Fogel.
Horseshoe, T. W. Murphy
Horseshoe, F. W. Seabury.
Hot air register, J. S. Baile
House See Portable house
Hydrocarbon burning apparatus, E. Baker... Ice creeper, L Bensel.
Injector and exhauster, steam jet, L. Schutte. .
Insulating compound for electric wires, R.
Waring...............................$~$
sulating material for electric uses, Waring
Hyde........................................
 apparatus for, Waring \&
Ironing board, M. W. Jenks. Ironing board, M. W. Jenks............
Jack. See Lastingatack. Lifting jack.
ing the frames and backs of, B. B. Man
chester.... ..........
Key. See Watch key.
Kiln. See Drying kiln
Kneading or beating apparatus, B. F. Sparrow... Knitting machine, J. K. Crawford Knitting machines, mechanism for operating the
arb guides of circular, McDonnell \& Sher
wood.......................................... man..................................... ........
Knobs, manufacture of metalic door, $c$. Pudde-
Knuckie joint press, o. P. Bushnell.
Label holder, box, H. H. Snow
Label holder. car, T.J. Parkinso
Ladder, step, H. P. Spence
Lamp burner, C. Gordon
Lamp fount. Bradley \& Patitz
Lamp, gas, C. W. Siemen
Lasting jack, I. Hall
Lead and crayon holder . W. See
Lead and crayon holder, J. S. Birch
Lead or crayon holder, J. Ho
Lifting jack, , L L. Ellis....
Lifting jack, Hoag \& Hervey
Lime, composition for treating sulphates of, B
Josia........... ............................
aging alcoholic, L. A. De Lime.
Lock. See Nut Lock. Seal lock.

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| Lunch box, A. Cox ................... ............. 266 | Table. See Resawing machine t |
| Magnesia, manufacture of, J B. M. P. Closson.... 266,970 | Telegraph, railway car. J. R. Finney (r)............ 10,232 |
| Magnet, electro, V W. Blanchard ................ 267,13 | Telegraph, ship, J. S. Gisborne.................... 266,98t |
| Mashing tub machinery, T. P. Kinsey........ ..... 267,225 | Telegrapb switcb, R. Br |
| Measures, building and apparatus for keeping and comparing standard. S Darling $\qquad$ | Telephone, mechanical, H. E. Huston.... ......... 267;008 Telephone systems, electric circuit for, J. W |
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| Motor. See Rotary motor. | Tire, wheel, Plummer \& Turpin................... 267,249 |
| Nailing machine, F. Myers........................ 26 | Tobacco, plug, I. Lottier ... .. ..... .. .. ........ 267,235 |
| Nut lock, Smith \& Barker | 'lombstones, etc., from plas |
| Oil can, C. W. Lyon........ ... ..................... 26. | ture of, W. H. Hoopes.............. ....... .... 267,206 |
| Oil conductor for car axle boxes, J. De Long (r)... 10,23 | Tool handle, E. Buell .. ....... ................... 267,060 |
| Ointment, Butler \& Smithhisler.................... 267,146 | Torpedo placer, M. D. Williams |
| Optometer, J. Lee........ ......... ............... 267,088 | Tower for electric lights, etc., C. |
| Package holder, G. H. Benedict........ ....... ... 26 | Toy tree, W. T. strasser |
| Pad. See Collar pad. Harn | Trap. See Animal trap. Ball trap. Fu |
| Pan. See Dust | Tray for finger rings, |
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| Paste distributer, W. M. Kennedy................. 267.000 |  |
| Pattern tracer, L. J. Purdy .................267,106, 267.107 | Tread mill, B. N. Van Nette.................. ..... 267,042 |
| Pen, fountain, J. Eriedmann....................... 267,180 | Truck for the bridge of a trav |
| Petroleum vapors, apparatus |  |
| C. Hall | Tug slide, $J$ |
| otographic images. method | Tug, |
| for producing. W. Kurtz. | Uterine suppor |
| Photography, drop shutter f | Valve. J. |
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| Pianofortes, stringing, Chard \& Littlefteld........ 267,50 | Valves, operating tank, J. E. |
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| Pile for channel and I-beams. H. W. Borntraeger, 267.304 | Ventilator, D. Robbins |
| Pin or earring catch, w. C. Temple ............... 267,037 | Vessel, sea-gutng. D. Ammen |
| Pipes, etc., device for screw threading and cutting | Wagon, buckboard, H. L. Bir |
| off, L. W. Stockwel.......................... ... 267,276 | Wagon skein, G. W. smith |
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| Pitcher, G. Gough. ..................... .......... 267, | Watch key, Bourgeois \& Jacky |
| Planing machines, tool holder for metal, P.J. | Watch. stem-winding musical, |
| Byrne .......... ........................... 267,14 | Water carrier, E. R. Killingsw |
| Planter check row attachment, | Water closet. S. Gol |
| Benner. | Water heater, automatic, J. Hawley............... 267,200 |
| Planter, corn, A. B. Clark..................... ..... 267.151 | Water meter, rotary, Fitts \& Wilson............... 267,174 |
| Plow beam, W. C. Chamberlain............. ...... 267,061 | Water trap clearer, J. S. Gall. |
| Plow beams to handles, device for attaching. If. | Water wheel gate and nozzle, S. N. |
| O. Kerns. | Water wheel, turbine, I. F. D |
| Polishing and grinding wheel, T. c. Belding...... 267,132 | Welding pipe, etc., machine for, A. A. Smyth, Sr.. 267,029 |
| Portable drill and forge rest, J. Hathaway........ 266,991 | Wheel. See Polishing and grinding wheel. Water |
| Portable house, J. Reilly... ....................... 267,109 | eel |
| Pot. See Flower pot. | Windmill |
| Potato peeler, F. Schulte ........................ 267,021 | Wrench. See Carriage |
| Powders containing nitro-cellulose, etc., hardening explosivegranulated, Reid \& Johnson..... 267,108 |  |
| Press. See Cotton press. Knuckle joint press. l'rinting press. | DESIGN |
| Printing machine, E. Anthony......... ........... 267,313 | Carpet, H. Hunt... |
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| Printing press, H. P. Feister........... ........... 267,172 | Embroidery, H. Bosshardt .......................... 13.31 |
| Printing press register pin, G. Wing................ 267,12 Protector See Dress Waist protector | Fringe, ball, G. S. Hensel............................... 13 |
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9,992 Blacking and leather dressing, E. H. Fennessy..... $9,7,774$ Boots and shoes, certain preparation for dressing and polishing leather. Lustro Company. Calf skins, A. B. M
CIgars, E. H. Gato.
igars, cigarettes, and smoking and chewing to
bacco. Esberg, Bachman $\&$ Co.................... Edge tools, certain, Cullins Company ..............
Moss and flber, mixture of, J. Domergue $\dot{d}$ Co Remedy and cure for corns, buaions, and other similar diseases, W. B. Moore..
Soap, schultz \& C C
Tanning compound, R. A. Wirbel \& Co. ................96, 9,786
Tobaco, cigars, and cigarettes, smoking and chew-
ing, J. B. Pace Tobacco Company............9,
Tobacco, plug or chewing, S. W. Venable \& Co
Washing compound, C. o. Strutz..................... 9

Wine, champagne, G. H. Mumm \& Co... ............ 9.780
Wige, champagne, Veuve Pommery $\&$ Fils...9,797, 9,798

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HINIS TO CORRESPUNDENTS
No attention will be paid to communctations unless accompanied with the full name and address of the
writer.
Names and addresses of correspondents will not be
iven to inquirers.
We renew our request that correspondents, in referring ame the date of the paper and the page, or the number of the question.
Correspondents whose inquiries do not appear after a reasonable time sliould repeat them. If not then published, they may conclude that, for good reasons, the
Editor declines them. Persons desiring special information which is purel houtd remit from $\$ 1$ to $\$ 5$, according to the subiect, we cannol be expected to spend time and labor to btain such information without remuneration.
Any numbers of the Scientific American Supple-
ENT referred toin these columns may be had at this fice. Price 10 cents each.
Correspondents sending samples of minerals, etc for examination, should be careful to distinctiy mark or cation.
(1) W. P. S. asks how to arrange two elec267,140 tric call bells on one wire, half mile apart, with open
cells of Law battery will I require? A. The annexed key at one end of the line. Both ends ar attery an the same way. The fixed end of the key is connected
with the line, and the back
of the key rests normally
 gainst the tip normally which communicates with the ground through the bell magnet. The bottom con-
tact, $d$, of the keyis connccted with one pole of a $t$.wo cell battery, $c$, the other pole of he battery being grounded. is sent from the distant station, it passes through the key, the top contact, $a$, and the bell magnet. to the
ground. When it is desired to call the distant station, ground. When it is desired to call the distant station,
the key is ressed down and the the key is "ressed down and the current passes from
the battery, $c$, through the contact, $d$, and key to the , ringing the bell at the distant station.
(2) A. P. asks: How can I bore a quarter inch hole in the top of a glass globe most easily, with used to cover statuary, etc. A. To drill a quarter inch hole in your glass shade make a bole in a piece of
wood or metal of the size wood or metal of the size
that you desire to drill in the glass. Fasten it with beeswax upon the glass for
a guide. A piece of brassor copper tubing, quite thin, 100) and water, and twirled between fingers, or with a hole in a few minutes. You can feed the emery and
water a little at a time
 through the tube. The (3) J. B. V. writes: You will grant a favor to a reader of your valuable paper by telling me how
to polish a mosaic (Floreutine table which is a little discolored by dampness and effects of handling. The stone is black slate, with fiowers, etc. A. Use oxide
of tin or putty powder wet with water, of in or putty rowder wet with water, enough to
make it a thin paste. Rub the table with a cloth cush ionwith considerable pressure, using the putty paste rather freely; add a little water to keep the surface wet.
When the desired polish is obtained, wbich you will When the desired polish is obtained, wbich you will see by wiping clean in spots, wash the ta
water, and wipe with a soft linen cloth.
(4) D. H. L. inquires as to the process of painting on glass, in imitation of gold and silver leaf, the same as is used on druggists' and business signs?
A. Yellow ocher mixed in oil is sometimes used, but A. Yellow ocher mixed in oil is sometimes used, but
gold leaf or paint is much superior. Gold or silver leaf is applied to a very thin solution of gelatine brushed
over the glass. The portion of leaf forming the letter is backed up with paint. The surplus leaf is washed is paint is dry
(5) S. B. asks: What is the best cement for mending broken minerals, fossils, pottery, arrow-
beads, etc.? A. Starch, one quarter ounce; white sugar, one ounce; gum arabic, one-quarter ounce. Disolve the gum in a little bot water, add the sugar an
(6) J. M. G. writes: If a vessel is filled with saturated steam and closed tight, and a fire put
under, will the superbeating increase the pressur per square inch? A. Yes; about one-four-hundred-and eightieth part for each degree the temperature is in(7) W. W. writes: 1. I have made me a 8 rocking valve engine, single-acting, of 3 inch bore and being 10 incbes in diameter; but $I$ think that is too small balance wheel. A. Your fif wheel should be three times
as large as it is. 2. I would like to know what hcrse power I can obtain from it at about tbirty-five pounds of steam as it is, and with a proper balance wheel, of
which I would like to have you give me the dimensions and weigbt. Please give me the rule to find the borse of your engine as an ordinary double-acting engine by the rule in Supplement, 253, and take one-balf the re sult for a single acting engine. 3. How many square
feet of heating surface wouid it require for a tubula boiler to run such a steam engine as I have described A. The quantity of beating surface will depend upon the velocity of your engine. 4. My engine has but one
cylinder: would it be strong enough to run the dyname cylinder: would it be strong enough to run the dynam electric machine described in SUPPLEMENT, 161? A.
With sufficient steam snpply, yes. 5. Does sucb an electric machine give electricity of intensity or quantity
A. It depends on the winding of the armature wire gives quantity, and fine wire intensity. 6. How much is a volt in electricity? A. A volt is substantially equivalent to one cell of Daniell battery. 7. Would put-
ting a little oil on the rubbing curfaces of the springs of ting a little oil on the rubbing eurfaces of the springs of
an electric engine do any hurt? A. Yes. Oil is an insulator and would have to be pressed from beneath th spings to get the current lhrough.
(8) A. D. 19 inquires: Will you inform me what is used by the American ladies to bleach a brown hair to amed in in SuppLement, No. 349 , is now
drogen as recommended in used with success.
(9) K. E. H. asks: What is the most rapid way of making a barrel of sirup of wild cherry without powder and tboroughly moisten it with water, allow it thus to stand for twenty-four hours, and then pack it tightly in a percolator and add more water until a quart bas passed; to this add twenty-eight ounces of sugar, nd dissolve it by agitation. This process affords a in
irup with all the virtues of the bark unimpaired by the injurious action of heat
(10) J. H. asks: What is the fastest time on ecord from New York to Queenstown, and by what
essel was it made? A. Steamer Alaska-6 daya 22
(11) J. F. S. writes: Plense give mea good receipt for preventing the hair of the head from falling
out? Try the following, which has been successfully out? Try the following, which has been successfully
used: Aromatic spirits of ammonia, two ounces ; gly used: Aromatic spirts of ammonia, two ounces; gly
cerine and rose water each, two ounces; tincture of can-
tharides, one-half ounce; alcohol, sufficient to clarif tharides, one-
the mixture.
(12) T. N. writes: A friend has a common flat boat, 16 feet wide, 75 feet long. He wants to run it by
steam, with side wheels. Will two common slide valve steam, with side wheels. Winl two common slide valve wheels 12 feet in diameter, 9 inch $\times 3$ 3y feet bucket, and run the boat 7 miles an hour? A. Yes; but we think
your wheel should not be over 1036 or 11 feet diameter. (13) W. D. K. writes: I have a cistern which does not hold water. Upon letting it get dry it
is evident that the leak is not in any one place, but is general by percolation throughout the walls and sides Will cement remedy this, and if so, which kind is best
and in what proportions of materials? If not by cement how can the trouble be remedied? A. We would adise cementing it over with a cement made by mixing (14) D. G. P asks what is the best for ndenser for a steam launch 30 feet lorm of condenser for a steam launch, 30 feet long? What should
it be made of-copper or brass? A. The cheapest and lightest form is a keel condenser, tbat is, a copper pipe outside the boat, firted alongside of the keel, and run turned on the opposite side and the end connected to the air pump.
(15) R. asks: Which will be most economical of fuel in driving a 20 ft . catamaran-a screw or ooat, and of course free from dead water? Have plenty of depth of water for screw. A. We are of the opinion
that a screw will give the best results, as the weight o that a screw will give the best results, as the weight o
the machinery will be less, consequently the boa best method of feeding a small boiler, i.e what will best methoo of feeding a small boiler, i.e, what will
be the surest and require least attention? A. There is no mode of feeding tbat is rellable without attention. It is and an injector.
(16) L. F. writes: In your issue of May 7, 1882, p. 332, the Massacbusetts Railroad Commis motive boilers, 34 in deep, $\frac{3}{1 \pi} \mathrm{in}$. diameter. Please in form me what is the return or benefit. A. These braces almost invariably break or crack at the edge of the
plate, and by so drilling the braces a break is discovered at once by the leak through the hole drilled in the brace. 2. Why is it in making silver solder we use proportions, so the molder, will melt at a lower in certain proporions, so the solder will melt at a lower tem-
perature than the article we are soldering? How does the combining the two metals lower the melting point explained.
(17) D. \& H. S. write: We are using a large quantity of boriax for welding cast steel to iron, and we celieve that you can tell us the best way to prepare
for application. We now pulverize it by attrition. perhaps you may say by grinding. and then apply it to the heated metal with a small ladle or spoon, and by this method much of it flows off into the fire, and, as wo If you cã̃̀ so tell ns, we shall be glad to pay you for it heat it in an iron pot gently until it ceases to boil, an then to fusion. Pour it out on a flag stone, and when need be used. It will not boil upon the metal, and con sequently less loss will be incurred.
(18) W. R. asks what makes the rumbling noise in what they call the whistling buoy at Sandy
Hook. A. The " whisting buoy," off Sandy Hook a heavy shell of iron which takes in air when it is raised by the waves, and when it falls forces the air
throngh a pipe ending with a whistle like a steam whistle. The note of the whistle is very "low."
(19) D. F. writes: I would like to have you decide a point in dispute. I have a tubular boiler which is laid up. I used to clean it out well, and fill up with clean water, and let it stand so when not in usc. Last winter a boiler maker told me to fill the boiler to the
dome with waier, then put in 5 gallons of black oil, fire dome with waier, then put in 5 gallons or black oil, This, he said, left the oil covering the inside of boiler remaining in boiler. Which is the best plan to adopt? A. Cleaning out and refillng your hoiler was proper as
far as it went, but if you did not boil the water it still contained air, which is a source of trouble. If you get up steam with the boiler full and blow a little steam from the safety valve, all the air will blow out, then
shut every outlet tight. You will find your boiler in the best condition for work at the beginning of the season, andfree from rust inside. This is the universal practice there are thousands in use that are steamed only about six or seven months in the year. We do not, know that there is any scale-removing virtue in the oil. Tannic
acid or a weak decoction of oak or hemlock bark i acid or a weak decoction of oak or hemlock bark is

## NEW BOOKS AND PUBLICATIONS.

Die Magnet elektrischen ond Dinamo SLERTRISCHEN MASCHINEN UND DIE
SEGENANNTEN SECUNDAR BATTERIEN.
(Magneto Electric and I)ynamo Electric (Magneto Electric and I)ynamo Electric Gustav Glaser De Cew. Wien, Pest, Le
zig: A. Hartleben. $1883 . \quad$ pp. 264. This is the first volume of an electro technicallibrary by Mr. Ciaser De Cew. The author gives a clear de
scription of the continuous and aiternating current scription of the continuous and aternating current dyna
mo electric machines, and a history of the developmen of these mechanisms; the physical laws goverring the of the several kinds. Secondary batteriesarediscussed
in separate chapters. The use of electricity for lightIn an appendix the author gives various formule for the constraction of electro-magnets and instruments for measuring electrical currents. The workis handsomely printed and is well illustrated
Kate Sanborn's Sunshine Calendar for which the daily calendar for the year is which the daily calendar for the year is
mounted. Appropriate poesy for each mounted. Appropriate poesy for each
day. James R. Osgrest $\&$ Co., publishers, Boston. C. T. Dillighum, agent, 678 Broadway, New York.
Nautisch-Technisches Woerterboch Der Marine Bearbeiter von P. E. Dabo-
vich.
The peculiarity of this new technical dictionary consists in its polyglot character, four languages being represented, viz., German, Italian, French, and Englisi. It appears in parts of eighty pagos each. The twelfth
part brings it to SCH of the first volume, in which Gerpart brings it to Scre of the frst volume, in which Ger
man and Italian terms (mixed) lead. while the German ords are followed by Italian ones, or Italian by German and both of these by Fiench, and that by English. The different languages are distinguished by the type, Italian and English being in italics of different fonts,
French in spaced Roman letters, and the German in plain Roman.
Giornale di Arligdieria e Genio. Roma: 1882.

We have received part second for May, 1882, of this handsomely illustrated journal. A considerable portion of the plates as well as the letter press is devoted to the application of the electric light to military purposes.
This is followed by an illustraterl article on the effects
of dyn
men.
ournal D'Hrgiene is a weekly paper ta, at 54 Ave. francs, foreign 22 francs. Each number
contains 16 pages about half the size of contains 16 pages about half the size of
these, filled with interesting and useful these, filled with interesting and useful
reading connected with this important subtrirtes Hand ond Holfsboci foer DEn Praktiscien Metallarbeiter.
Von H. Schuberth. Hartleben, Vienna, Von H. Schuberth. Hartleben, Vienna,
Pest, Leipzig: 1882. Illustrated Handsistant.
This practical and exhaustive work is intended to while the sciences that bear upon the subject are also briefly explained so far as they interest the artisan. The work is issued in parts of forty-eight pages each,
ten of which have already been received, and five more ten of which have already been received, and five more
are to follow, so that the complete work will consist of are to follow, so that the complete work will consist of
seven hundred and twenty pages, illustrated with three hundred wood cuts and fifteen colored plates. Price in Germany, 15 cents per part; $\$ .25$ or the entirc work.
The book is divided into sixsections, the first being devoted to the metals, their occurrence and preparation, their chemical properties and qualitative tests. The second relates to making moulds and castings, also the galvano-plastic art; the third treats of working metals,
such as roiling, drawing, spinning, bending, ciitting, such as roiling, drawing, spinning, bending, citting.
welding, soldcring, riveting, etc. The fourth describes welding, soldcring, riveting, etc. The fourth describes the decoration of metals, etching, polishing, enameling,
varnishing, etc.-, in the fifth we are to havea description varnishing, etc., , in the fifth we are to have a description
of the motors, including the steann engine, hot air, gas, and water motors, while the final chapter will treat of geometry, mechanics, and drawing.
Hand Book of Tennessee. Prepared by Agriculture, Statistics, Mines, and Immigrations; assisted by Henry E. Colton, Geologist and Mining Engineer. Nashville, Tenn. 1883.
Describes briefiy the geography, topography, and Geology of Tennessee, its useful minerals and their outcroppings; its timber, agricultural products and capa-
bilities; railways, educational, social, and political in. stitutions; the natural and civil divisions of the State and their several characteristics; and gives much other information of interest to intending settlers and in-
Point Lace and Diamonds. By George A. Baker, Jr. New York: R. WorthingA new edition of Mr. Baker's pretty little book of society verses, with some additions. Mr. Baker is clever at verse making-so clever that it seem
that he should spend his time over such trifies.
How to be Weatherwise. A New View of our Weather Systert. By Isaac P. Noyes. Explains briefly the conditions and effects of high and low barometer and other meteorological phenomena upon the interpretation of which our Signal
Service weather indications are founded; and shows Service weather indications are founded; and shows
how by a proper study of the weather maps everybody
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