Third, The apparatus de scribed, consisting of air cylinders or vessels
divided into compartments riaverrsell by tubes with stoppers fur secur-




35,173.-C. E. Rankin, of New York City, for Album $\underset{ }{\text { C clasm, as }}$
of the dagnerreotype cases, $A \quad B$, with the photomraplice leatesc, $D$, of the dagnerreotype cases, A B, with the photograplic leaves, $D$,
and bookcover, C , as and for the purpose shown and specilled. ['lisisinvention is a good improvement on the ordinary photographic album, and it consists in combining two ordnary daguerreotype cases tographic or other portraits, in such a mamer that an album case is obtained in which daguerreotypes or ambrotypes, as well as photograpli
35,174.-J. H. Redstone and $\Lambda$. E. Redstone, of Indianap-
$\bullet$ lis, Ind., for Impr vement in Valves for Steam Engines :
We claim, irst, The hollow valve, $A$, when constructed as set forth
 35,175.-E. B. Requa, of Jersey City, N. J., for Impreved Lamp
I clanm, iirst, The :combination of the two tubes, G J, one placed
within the other, and the inner one inclosing the wick tube, E, whien satid tubes are provided respererively with cones or dellectors, $I$ I I , ,
constron passange, é, to increas e the rapidity of the draught and cause a quick
cturent of fir to impinge against the sides of the thame, $j$, substintially as and dor the purpose set lorth.
Second, Providing the lower end of the wick tube, E, with a cap,


 Thrd, Inselathng the comps, II', from thear respective tubes, G J,
by means of phaster of taris, or other tood non-conductug ecement,
tior the purposise of preventing the heat being conducted down to the hior the purpose of preventing the heat being conducted down to the
bunner and foumanh, in sel torth
Fourth, The combinatun of the two tubes, GJ, cones, II I, wick
 IThis iavention relates to an improved hamp of that class designed for buruing coal uils withont a chimney, and consists in constracting
the burner of the lamp in such a manner that the flame wiil be supplied with a refnisite amonat of oxygen to insure perfect combustion andit the same tune be capable of being alapted or applied to any of the lamps in general use, without heating and vaporizing the oil in the lamp to canse anexplosion thereof, and witinout olstructing the rays of light or casting a sinade around the lamp.
3.,176.-A. K. Rider, of Hydeville, Vt., for Improved Cut-oft Valve :
I clann, first, The cut
the dirertion of the movement of the minin ralve and applied in the



 35,177.-E. Y. Reblins, of Cincinnati, Ohi $\bullet$, for Imprevement in Ventilation



 of warming, toa moderate degree, the fresh air betoret enter the
ronm, sulntantiall as st thorth
Thrd, fin ease of warning the upper rooms by the waste hetat of




 35,178 .-H. E. Robbins, of Hartford, Conn., for Impreve-

- ment in Tebacce Cases: - ment in Tobacce Cases :

I clamp, as a new artucle of manufacure, a pocket tobacco box, con-
struted substantianiy in the manne": as and for the punpose as de-
scribed. stribed.
35,179._Watson Sanford, of Brouklyn, N. Y., for Imprevement in Dampers:
 35,180.-Wats॰n Sanford, of Br॰oklyn, N.Y., for Impr॰vement in Hot-air Furnaces :

 or pipes all 111 one prece, substantially as and for the purpuscs de-
scribed Second, Forming the fire pot as well as the lower section of the

 Third, Providing the furnace or heater with an cullarged dome, $b$,
in combination with the


 35,181.-Watson Sanford, of Breoklyn, N. Y., for Imprevement in stove Limings
I claim, tirst, The pins, b, as and for the purpose speciited.
Second, The combunation of the pius, $b$, with the conrugati
cells or pancels, c de substantially as and for the purpose set forth.

 35,182 .
35,182.-John Shaefer, of Lancaster, Pa., for Improved
Attachment f or Bedstead lails:
 35,183.-D. C. Smith and W. P. Walling, of Adrian, Mich., We clalin the combination with carnnge, $K$, of the plate, M , arrang-
ed to work in ioint operation with suring, T, pawl, 12 , incline planes,
$X X$, clamps. $V V$, and lug, $1 \times$, for the purpaise set forth. Second, We also claim, , 1 connination with the foregongt the bail,
2 , rod, 3 , and cover, 4 , counected together as described and for the pur:-

35,184.-H. J. Smith and Woodruff Jones, of Philadelphia, Pa., for Improvement in Apparatus for Testing Coal Oils and other Mixed Liquids We claim determining the anomin of volatile intlammate mater in
compomid hinds by means of a thernometer and a thane, the thro.
 lattel and the valner gener
substantially as set forth.
$3 \overline{5}, 18 \bar{j} .-J$. P. Smith, of Hummelstuwn, Pa., for Improve ment in Corn Shellers
I clam the shiftng bheaters beam, $n$, arranged and operating in com.
bination with the shehln't cylinder, $d$, substantially as and for the purbination with the shellng cylinder,' $d$, substantially as and for the pur-
pose specited.
I also claim the combination of the shelling bar, ; with the shelling I also clai,m the combination of the shelling bar, j, with the shelling
cyinder, d , and shifting breast beam, n , substantially as set iorth. 35,186.-W. W. Stearns, of Jølns $\bullet$, Vt., for Imprevement in Wooden Tubing:
 and wire, ir F , orits equiviluent, substantially as described.
$35, \mathbf{1 8 7}$. R. Van Ormer and W. J. Bell, of McAllisterville, Pa., for Improvement in Balancing Mill Stones We claim the combination of the rods, $R$ R', spring, $S$, and screw,
$S^{\prime}$, in tie mannel and for the purpose shown and described. 35,188.-W. H. White, of Woodlury. Conn., for Imprevement in Sheep shiticers : Iy m the manner described, and consisting of a steel bow, iron handles
and cutting edges. arranged and attached to each other substantially
and 35,189.-J. P. Walter, of Brooklyn, N. Y., for Improvement in Vacuum Tanks:
I claim first, The anrangement, of one or more air pumps, B, in
 scribed ind The arrangement of one or more reservoirs, E , containing
Second in the mand suituble clemicals in combination with the air punns, $B$, and tink, $A$,
substanually is and for the purpose setforll. 35,190.-Chas. Wadsworth, of New York City, for Improvement in Car Ventilators : I claim the combination of the air filtering screen, I, and air cham-
ber, with the alrforcing beilows, substantaily ats and tor the pur-
pose shown and described. |'This invention consints in
pure air through the medium of one or more bellows and suitabia pipes or pipes.
35,191.-J. B. Winchell, of Chicag॰, Ill., for Imprevement in Sewing Machines
two threads and sew marmisw in the sime din wetion withont clhangintrat the direction of of od or mi character of se wng, with a single
pointed hook or interlocking device, substantionly ys described, wheth er the comperting mechanism inerinediate between the upper needle
and tin hook or intenlocking device 1 s set mo motion by either a back

purpeses set forth.
Third, The eomblu
 35,192.-G. L. Witsil, of Philadelphia, Pa.,_for Improved
 or destribed and set forth.
35,193.-J. J. Wood bury, of West Rexbury, Mass., for Im. provement in Arming War Vessels:
 fended with armor plates or their con ciuvalent that the ship may ap-
prowech an enemy writ reasonable safety, substantially in the maner ind for the purpore described.
Second, Cumbining a gime const and emproyed in a vessel at describent, with in appropriate min corriage 4 , suppont the breech; ;
 Third, Displating the water from the bore of the gun between the
charge and mankil. by means or air-tight displacing case, or its equivcharge and manklit by means or ai
alent, sulbstau tially is described.
35,194.-A. E. Y oung, of Dorchester, Mass., for Reflecting Lantern
1 claim a glass lantern iwd as constrncted, with a lateral neck and and
opening or socket, aranged reflitively to iss top and bottom necks and opemings and forthe reception and fixation of a reflector, substantially
as specified
35,195.-Erastus Young, of Penataquit, N. Y., for Improved Washing Machine :
clanm the arrangement of the adjustable fulcrum pin, $f$, in combi
 Lorth.
|'This
aujustable f Allating pressure board, in such a mamner that by changng the posi tion of the fulcrum of the hand lever the pressure board can be ad stothes cor ches of lifiterent size and of diflerent fabric, and that the ingellected withont much exertion of the oprerator :ud without the eilst injury to the fabric. 1
35,196-C. F. Allen (assignor to himself and C. B. Beebe in Car Bumper and Draw-head Springs
I claim a car, bunper ordraw-head spring constructed substantial
in the manner and lor the purpose set torth. 35,197.- Victor Baron, of Tabance, St. Salvador, assign or
t• himself and W. W. W. W $\bullet$. for Improvement in Concentrating and Cleaning, Ores causing it to pass along an agitated channel submerøed in water, sull
stintially as set forlh. 35,198. - Hiram Carpenter (assignor t $\quad$ H. V. (Gahagan)
of New York City, for Improvement in Construction

 35,199.-H. E. (iill (assignor t• Erastus Jarbox), of Og . den, $\mathbf{N}$. Y., for Improvement in Machine for Packing Apples:
claim the c
I claim the combination of the spring houk clamps, B B, with the
cruas heads, A, screw, $\mathbf{D}$, and follower, E , substantially as and for the
purpuoes specited
35,200-C. D. Ingraluam (assigner to himself and C. A.
ant A. Bardivell). of Soutl Falls, Mass., for Improve
ment in Straw and Hay Cutters:
ment in Straw and Hay Cutters:
I clam a cylinder of knives formed by having the knives arranged
sets or pairs which are shoter than the cylinder, and attacied

[This invention relates to that class of straw and hay cutters in which a cylinder of bnives is employed in comection with a rotatms cylinder to form a bearing for the cutting edges of the knives. The object of the invention is to obtain a machine of this class which nil work or operate with the usual rapidity and cut die, hayouretran much longer than those hitherto constructed, and still be self-1cedng. 35,201 ...Josiah Mason, of Tirmingham, England, assignor provement in Boxes, Cases and Cards for Pcus. ©. . clatim a bux, case or card having a recess or recesses , wi: per-
 elves, as set forth for the purpose specilied.
35,202.-Jeseph Meore (assign or to the Vulcan Iron Works
C .), of St. Francisc Ce.), of St. Francisce, Cal., for Imprevement in Ore
Crushing Mills :


35,203--I. S. Schuyler (assigner to J. J. Eckel), of New York City, for Improvement in Baling Press


 35,204.-E. W. Seymour, of Lisle, N. Y., for Improvement in Method of Constructing Carriages

 dratt.
1,572.-J. W. Bush, of New York City, for Design for Muk-1,573.-G. B. Owen, of New York City, for Design fur a 1,574.-W. G. Pliclps, of Newport, Del., for Design for an Arm Chair.
1,575.-Henry Terhune, of New York City, for Design fur
a Clock Case.

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## $4 x^{2}+5$

C. of N. Y., and S. J. B., of N. J.-A deed of transier of a patent should be pint on record within three months after its date. The purchasershonld pay the reending fee umess there is an agrement to the commary.
T. T., of N. Y....We think you are on the right track Submarine vessels must yet occupy im impontant place in the destruction of naval vessels. The subject is worthy of mach attention, and other parties: are at work trying toderise some effective vessels of this character.
A Miller, of Ohio.-Your reply to "A"Young Miller, is receired, hat ass the same ground has been taken before yon, well not pmbish it. We have alreatly publishesl enough on the subject. . B., of Conn.-We are impressed favorably with you propecte, and should think a mont might be obtained tor it I. F., of Ill.-Your shell filled with chloroform and ca yenne pepper would be a very harmless affair:
W. H. S., of Mass.-There are projectiles in the service formed on yonr plan of cast iron with a steel face
J. C. A., of Mass.-We have bushels of communications, ancl when one is exmmed and passed nom, it goes to the paper makers, and we can see it no more. A patent could probably be obtaiinoll for your cormposition.
C. E. W. S., of Wis.-It takes one-horse power to raise $33,000 \mathrm{lbs}$. one foot high per minute. A cubic font of water weighs 621\% ths., and the area of the cross section of a pipe 6 -inches in diamefer is 28,274 inches. We should want to know the velocity of serin stream in order to answor your question; but from the above data yon can make the calentation by the simple rules of arithmetic. A. S. S., of Pa.-Magnetic electric machines produce a current of electricity which, massing through a heliual wire, induces magnetismina piece of softiron in the core. No acid or otherliquid is nesed, but power is required to tum he machine. See illustration tific Aspers magnoto-electric machine on page 3.53 , vol. V. Sonis city in relation to it.
C. M. B., of Me.-The substance that you send us is kaolin, and if yor
J. B., of Wis.-The idea of exlausting the air from the bove of a gun is a very old one and not matentable.
H. I). B., of N. Y.-The operating of a melocleon bellows by means of a weight insteal of by the foot wonld not be paten table : neither would the use of a spring, fiom the firct that both plans are in use in other aualogons pieces of mechanism
IL., of Mass. - Your thermometer a ppears to be new and useful, and we think a patent can be obtained on it. A model is necessary, and when you send it state as nearly as possible the proportion between the ho
the aetual heat of the metal
C. W., of N. Y.-You will find the Fourneyron and Jonval Wheel rlescribed onpage 232 present Vol. Somevtion Amprocin
The Founeyron whel, does not discharge on the underside, like The Fonmey
the Jonal.
C. S:, of N. Y.-It would recpuire a considerable amount of power to winclup a springto churn a large grantity of milk, but a small churn, we think, may be continually operated by a spring. Yon can easily make the experiment without incurring much expense.
W. F. R., of R. I.-You state that in your opinion plaited wire of "sufficinut wickness", would resist shot and shell. We have no doubt of it, but what doyourequire as a"sulficient thick .C. C., of Ill.-A bullet shot vertically will return to the muzzie of the musket with the same farce with which it leftit minus the loss of force sustamed ly the resistance of the atmo
sphere. The spaces pasced through by falling boties are propor tional to the squares of the times, 16 feet the first second, 64 feet the second, and so on. A feather and a plece of metal will fall with the same relocity in a vacuum.
T. A. McD., of Mich.-The manufacturers of "oreide.' an imitation of gold which does not readlly tarmsh, are Messrs. Holmes, Booth and Hfyden, of Waterbury, Conn. They have warehonse at No. 81 Chamber street, this cits.
F. D. P., of Wis.-The largest importer of music boxes knownto usis Marins J. Paillard, 21 Maiten Lane, this city. He
has instruments which play from two to thirty-six tunes and the prices way from to quality of the instrument,
H. M. D., of Ohio.--A series of paddles secured on an parless chain and passing over tro groved pulleys on the sirie of a steamloat, is an old mode of propusion. Yon will find this system
 Yon will also find Lamsey's mode of propeiling, by eierting atarrent of water from the stern of a boat illustrated on page 112 anme B. \& Co., of Mass.--Iron may be coater with copper by first corering it with a skin of tin. After being timed, the iron diped into a bath of moiten copper, the surfacen which should be covered with a layer of gromed glass or stand.
L. I. B., of Ind. - A vety dark blue may be dyed on wool

 guarters of a.n hour $\cdot$ !
J. P. J., of Wis.--We have given our reasens in former: volumes of the Scrmofec Angricas, why hot-air engines are not adapted for lucomotives mid large moturs. Small ail enginos are very comvenient for some purposes.

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Specifications and drawings and models belonging to parties with the following initials have been forwarded to the Patent Oflice from May 7 to Wednesday, May 14, 1862 -
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