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gRAY IIERBARIUM OF HARVARD UNIVERSITY

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chinese shruber of. Anbonetum 88. mereor. nownod. nace 10. $9^{3}$. brobeak 17 mok 1911 ano for plate q" Ree Eatom 7erns bol2.

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Eswal L Rand Ang 1911 120 Elm ft cormes of Savenportt tx no Cambsige

Simpling page 8\% Medfield while pimes 85

THIS SUMMER ON MT. WASHINGTON To the Editor of the Transcript:
For thirty-flve years an occasional guest upon this Summit has been heard to exclaim: "Oh, if I could see this old mountain as it used to be when only a stone shelter was here!" or again: "If I could live in the primitive manner of the could live in the tourist to Mt. Washingpioneers!" The tourist o moas is enjoying just those ton this sea

The old Tip-Top House, bearing the weather worn slgn-board "Erected in $1853^{\prime \prime}$ has survived all its nelghbors and this August morning stands with open doors, the only shelter on the Summit to provide food for the hungry and a refuge for the tired wayfarer. The story of the rejuvenation of this old structure may be of interest to the thousands of visitors who, in former years, have marveled that it was ever used as a habitation. One it wo has ever seen it will remember the who the TIp-TOD strange construes which are built of loose House. Its waver al feet in thickness, support the roofs that is chained in defiance to the mountain tempests. Narrow winlows in deep recesses permit scanty light to penetrate the interior and withal, its talent invited only hasty inspection

When the new Summit House was opened in 1873 the Tlp-Top House became one of the sights of the Summit. For a few years it was occupied as a printing office by Among the Clouds, then it was abandoned and used only for storage purposes. The roof was kept shingled; the windows were boarded up; this was practically all the care it had received during its many years of almost abandonment. Wind and rain and winter storms played havoc through it and each recurring season found the old building more and more in a state of delapldation. But it was only biding its time. The destruction of the Summit House and other buildings on the 18 th of June, last, left only the Tip-Ton House to tell of former occupancy. Without honor and ridiculed for a third of a century, it was, nevertheless destined to achieve new fame and to preserve unsullied Mt. Washington's reputation for unfailing hospitality.
That the Summit could offer more than That the summit could offer more tempos3. mere shelter this season seemed imposesible. Repeated consultations of those in authority confirmed the opinion. But they reckoned without their host. Reeking timbets, protruding walls, dampness and the litter of years' accumulations did not obsecure the vision "It can be done" became the slogan, and the visitor of today may behold its truthfulness. Just as many men as could be employed in the old structure were given work, and presto! In two weeks the Typ-Top House was not only habitable, but, with exterior unchanged, it was ready

of the Summit pioneers." The interior of the TipTop House is renovated beyond New walls and ceilings, comprenenalon. give an ancient ap stained walnut colortment, while the walls, pearance to the apart with thick clapwhich had first been lined with board paper, are hung with green cloth. Two immense coal divided defy the cold. The first floor midway the Into two rooms by a partiving room. The ends. The front is the lunch room. A second is fitted up style, long counter, \& la railroad to weary blfurnishes a substantial menu family dining grims. Here, too, is the family dents the table, and after the departure of purposes of room is used for
kitchen and pantry little sunset observatory
What was the on the west end of the hour baker and kitchen. A big hotel range and of available a small table occupy every inch of ava wind space. The eddying currents of often around the Summit may and and drive cause the chimneys to smoke, but when in retreat the faithful in the old Summeal time approaches, as in the old. The mit House, the larder is never empty in the chambers, as to size, are exactly as in the early days, excepting where the sky have have been boarded up and two rooms Pierce been made into one. Ex-President many once slept in one of them, so in turn are other dignitaries; and now we fort, thankfinding in them absolute comfort, thank primitive fol that
are very cold then just be Some ne retire, oil fore the early hour when corridors and heaters are place त along the same way in the chill is lessened. In the sames to our the morning the watchman attends so accomfort, and hot water never was Frank ceptable as the pitcherful ing boards give brings us when the sounding holy, the old the get-up signal. Unfortunately, the old Tip-Top House can accommodate no overmight guests. After the departure of the noon train we are much alone, ave as the trampers come in. from their walks over the mountain. Of necessity, the dally life of the Summit colony is simplicity itself, But all day long the winds sing to us: the rocks preach to us and the fleeting clouds remind us of how short the expertchou ours, which at best "abideth
but for a season."
N. H. L.

Old Tin-Top House, Summit Mt. Washington, N. H.

1908
Blue Hill
9 tome Jopop of Blue Kill in Rm. Saw no Liparir but foeni some 15- 20 carex glancodea of Whueh \& took one. noketalso MimRehderis hybrid Qnereus ilicifolva $X$ velufua or rubras. very kox day.
oak bklaw
"fune took 12.35 traim with finmie Ireat arowett all ale laigir thmigs at the Dolars, Romueh so one couco uot'look lulow then foter grouns as aee. Prought back a soft pubercent
别 Ampilopris diel not Rubercent clumbur the treer, but oney qrown luxuciainth i ener eve alow burli is the rech gromed: bivought home ovs cutleaved unaple in gaibu. gof lassafras, ${ }^{\prime}$ bitis, rathyrus salustri', 'fine'var variaur jecurex lápflora: also a mall fkirgilaria rutra witt a fingen wi Favlawwriter me is mterusting being Gstopus Lepigoni

2
14 ferme thai lome onive meturtorest Lx tolook for Liparis lilieqolsa on the oidn plsuct NuL but did nox fnit any. Prought brak finc opecomin in ouce flowes of balin lanceplotum * a reny wide leaver Louiflore carex. Home be 10 anc
15 funce with a $A$ at 12.35 to
Oak bolans
$\nabla$ got ale the oppergularia atflictes with Cystopur Le pigori g coned fins + took tuo paper bags qu the plauts fo Farlow at 4.30 oclock: he mas wot at howne. I sot 5.15 fu Reabville. Preivellia also Imelacua otillata tho notin flower.
did rut yo fair willu the gates othe enclosure as foing new were skrayeug the frees in wost vegorourfuathu The hegh south ulues carres the spinay far.

1408 Wrekford Rkode Solant. 3
18 forne. Lefe poston 5.03 on Jrexiday the 16 th with E, 7. Mrllanm N Kept by" norker Prentios a character well Huviv. i Rhode iseant: as gorlo telephoue men has eame that afternvon we hat fom rooner is the Amer. did sidx slep much, the qiick otivisp church bell uear ley Akpx us all awake: But Team next wosur
with a ome bor tolorive th went west of the noith by Kughway to the Camp road liading to the vunis camp fthe th nillitia the aney Known otatern the onercis Alillata is R abt a inle fonn the concer; Reverae tair ayes trees.' ne corcioted man thmi on the roarside 4came leact to onner. topur up owr plants. sturted ugain at 3,30 to coed Sting beach fink

4
lent the place did not look intenalis botamicaller so we sone hackle. across road + aron the millage (ouch fist) + Hook, Rum highway as in am r before goth to the camp rout covicu true if to the left went as las as the $/$ p tho pos woos witt brook pooh. collecke all the tire. filler two bores. that noes up mi mere Froingatury loss home full.
Left Wrekfird $7.52 \times$ arr Bran 1020.
very fine cool sinner wreath

1988
Ludlow r rit stalley dof.
2: Finne diftboston 11 am wite adx arr Lideow 3.45. Roous at Ludlow totil: ßin with hwo homes torives to NKTyson Pous ŷblack Rwer vally: feenery like hbarnow i ratter noxis the sun. Jlora like Libanou. Everus malket un the road to the Tekeber Memonial Sibrary. a soid trilliviz roving. as table abt 20 specmines twild flonvers in glass farr there pes. collcexio by tue dohore chedren wame in y exam med chich weth care the most vificeable was eyp. reginae at R化 atatcon met inridune purallinfius

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Thr chadbonrue sumer tolturn The Mlmus Phoiveasici, huico sum one tree at Bowbrvele a aml welage nott har frotu Saat lirallery rom.

Purgatocy.
30 tume. Drove to Derham Roas formet C. 7 F Me whark at 10.45 . we twok path onp Mrashlum Road T did rok go as fur anta neaion, then in by कrele , the Bis Tukil' free to sea katte tive broox brerie plaes. Touni a Petralemin mifune vannill at wort miaking boacs from the log haulid fion ren fown the path tomans meatso trot fire frewh of Taxur o Covis Anmonumu "ame back or thew to the. ued purqatong nowb sot Werve phaots Andodriodra angustitolei at the ove slaee then fo the big fximus belunelr, t tiew by graosen poud fatte road Eto eee es Rtatuon at 3.15 + Ahaiu to Rea rrille.
mr whork had never been fo purgatom cepowe. They ktaid hue to dirmoer
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vought torue $12 \times 17$ thect
double theet at skratt

- tquedioh mami Ca kaber In my wire , mosts. the 4 shet veigh 20 mnees the 96 theets bit 35 cents.

fuly 7 Lift Boston 11 Mm with Ruk Homal. hot uneathe in chouges af the fmmint ain rain came most as we reushur the Adduron thouse atlo. we have roons 24 *25 rhath frumit latter goad aptin a hrot bay.
Prlys. Ther to reacu. Breaoloaf toth last eveun kttw moring bit famit when hur Ther encleanes came hue at woon that the thinher otom had bexint ont their Ioliphore. They dime hue io mett a new fecu we all to Weybinde bindop over Remon tair o akter scarch ithe debis under the busker fornd a few of ees of the Arisaence Dracontunn most tr Amall your $p$ thrile but or fornut one plowery fheei men. The grass hud beew mones close up to the bernkes t other nour have been so cutbf. nny flowerir one was duttin the clebris. The corne in the eanct buriele a long burus meh loy. ith is evedouk that


The Rev. Dr. Charles Marsh Mead, for filteen years a professor at the Andover Theological Seminary, and later at the Hartford Seminary, died suddenly last week at New Haven. Dr. Mead, whose home was in Cornwall, Vt., was one of the original members of the American Bible Revision Committee, and was active in the work of the revision of the Old and New Testaments. He was born in 1836; he graduated from Middlebury College in 1856, and from Andover Seminary in 1862, Three years at German universities led up to the Ph.D. degree which be gained at Titbingen. Froin Middlebury he recelved the D.D. and LL.D., $\left.\right|_{1}$
and from Princeton the former degree. His works include: "Exodus" (in Lange's Commentary), "The Soul Here and Hereafter," "Supernatural Revelation," "Romans Dissected" (under pen-name E.D. McRealsham, also in German, "Der Römerbrief beurtheilt und geviertheilt," under pen-name Carl Hesedamm), "Christ and Criticism," and "Irenic Theology." $23 \geqslant$ ". $1 \overrightarrow{910}$

So far as satisfactorily determined, the Cambrian of Vermont occupies a narrow strip from north to south through the state between the Green Mountains and Lake Champlain. In some places they reach the shore of that lake and form the boldest of the headlands.

Northward the Cambrian extends to the Gulf of St. Lawrence and south through New York to middle Alabama.

It is probable that there are derivatives from Cambrian strata in and east of the Green Mountains, but none have been certainly identified. So far as studied, all the beds belong to the Olenellus zone of Walcott, or Lower Cambrian. The very interesting and extensive fault and overthrust by which Cambrian strata were lifted and thrown over the Utica is noticed. In all there are not less than 10,000 feet of Cambrian beds in western Vermont. These beds consist of 1,000 feet of more or less silicious limestone, and the other rocks are shales, sandstones, quartzites, conglomerates, of very diverse color composition and texture. In a few places the red sandrock beds change to a thick-bedded brecciated calcareous rock which when worked is the Winooski or Champlain marble-a mottled red and white stone used in many large buildings in many parts of the country.

Few of the beds are fossiliferous, but some abound in trilobites, Olenellus, Ptychoparia, etc., and a few brachiopods, worm burrows, trilobite and other tracks, etc., are also found. In all the number of species is not large, probably not more than fifty have been found. Of these, trilobites form the larger number, brachiopods coming next. A large portion of the species were described from the Vermont beds and many have not been found elsewhere.

Most of the beds are thin, but there are some several feet thick.
The great beds of roofing slate which are extensively worked in southwestern Vermont are included in the Cambrian.


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mt Rhilo
foly 9 Left ou 8.30 trani Mme Lewir met us at "orth Ferreshuz oxateon The ino fo the Ime: The-mens aftue Ereen Abirorchack ints homeve rreu veruf bive, ant as the afteruran capur a thaze onerapreno the nooteru mots bke our Lake beorge pictuce ak torel kaltie 2 emanno in the kiagsa \& thas on woekd haefming esp the not ta the Lidger ou the nows. met pur Humphreys? rosekio have way uret ${ }^{\text {wime }}$ drmer at Back to drman af 72.28 or Plu a randereot sown an obd raad ah/ the house von the highcory Baek to the hounet kalke mith mir kumatrey, Ro.e. 60 Drove to the staxcore fer the 4.30 traim $\forall$ tome. at $5.1 / 5-$ Ceanothus orratus es int. remaras Sulva, Hiu perny tree plantioly the house It sevecul meld oner an raai eide. Phiryina r Circaea.

Breadlaf
10pely 1908. Jine clear smmer day
 Th $9-20$ to 11.20 . 11 miles: The cold thririg a zow elinna the hill beyoni asif middlebry is mont excullerot maxes. E.G.N This vife are in Brieh coltate clove to the trithe Dumuer at /idoer *afterimuis rue tai a arat with Bur Battell ant \& life the man, the there is $x$ lixte ácational Emntirears secntemment in this orriee tace Ke foet ses of turo mmoicat. givel in hithire edvecafice he has burn inkerexeci anded the adomeres Borincect, an tuet I may yay love himi.. Then sinice s oractie o mive t a half us tu port Ier a descrted horco 20 riva Sipnoticurn Lerwiefien $\mathcal{L}$ is eprcuning, -ohker poweicn bemuts. $i v e$ sarm bxex $\rightarrow$ the wollope whuc the ladie, Reed wecukeco the pirgse orr the ftwa or vides pagriv an the neornafaiven
me-rtartech huch ot 4.30 retoffew a1-tue podophyllu blace branuend took no to in fune Formi no fruit; ith hade ace ried off, but' $\partial$ toole two pkecinieis. We were home átle.30.
fuly 14.1908. we have hat hot matler on ha have oone very litele muce brear Loat, 3 days \& ex reme ruat.
pook rimn nuead hue: he one of the Revikers of the Bibce o a Mebreu-sicterear ares the a prater A Pro/s thayer of Cambrede acedruer. zesterday 及u ine tad ave ank orive Ruver Rread Loal, aox the village college s ound $x$ then north bug Eov Ilewiants kloer $r$ onf tuo mile on the raad moth tine adrerondech riesp. Jo day ve arv to leave at 5.3.6 for honstral shorver lartruighx

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* fuly. Me rtaid Focsibuy night atthe Mindor montrual, after a keantful tmose ride aeross fovet tronth Kero in upher tabe Ghamflavin.
peaterien monm. up early $\overline{2}$ ort $q$ velock train for 1000 daud
 12.30 . The day naw wery fire - $\rho$ dat alone in diviz car with braoे fine numbons Tinjayo the teansifue ofy. Andlie Ennma nuet ues offir dimme me ment $\&$ Their (Hay) Iscant wisperix the aptennown Honie at duale when a virlent miin fhoman hat serbridecl. we have rooms $2 / 3,2, x+2,5$ vide patterove asthe Eonanoque vru.
on tay \&olaus
astragolis Cowoubersios $X$

16 faler a very time day. weth mav malkid abont the town is am rMk came at 10 t meittbeiell at 12 to get the oflers fur the 2.25 levat annous the bolunds "to alexavora Bay ockyten. Reacheo hourne at $\% .20$ ts a beautiful tumset after u sail amorey the lolais. what a qexuenceable thark co past mofor haat is ar Spacho tieir neigabor hod of is abvelistele rumei fer a quinef uriseled bur or Elven dury in the baoting barks an Reveral came fo bray okland.

16
17 fuly. Nat an wours pralk beefore brealafast $x$ then the ram pund began true have freed the muele dexiser oftorn. If renifo the swith fruo rames all day -

18 finly a variabee oan dut with Paturiay rain in am
ln lill mackid noret pote toun a thark bit buk came Rome leefore the rain fiee from a very blacle cloul.

19 frly a very fine ba-y t ure weix sinitay overto kan solaind at nore apher 2 had movkeo th the Epiceptal clurele wheret remaineio afewn rozmerts. Had divmi o a fhott quele $n$ the orblond lent a thame sponve us hernce: in liavie upsour tue inenftanke smbet religuzr Renvice ithel thron Bay whine The convpain in Boasts paine
hermms rerténcer to a 20 nimute servomer fy a fuor mevexter the sffect- 4 ailor. $T$ oty hrei true. Ther serviee Kus bien bued cach shuwe for Rokn Heam is a crui ter is manke. tannee har bien siven by an ancercan ladr. Thuce i a notural roel huekik Fblahtovir aprice fieleo topte hean hoiris powver boat tmines invilleis cawve $t$ at 8.30 ine huere buele hue to to tovel it the neotornowit fen thar Ixlais.
20 fly . 7 Nkar klaus of 9,30 yshad
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21 firl Ranm in ane: un froctikes Inesour reaorn alowo the prok tatax Non lus Edmun forne.
tork a thont macele in feni mith one eype on the clonds.
pred.
22 fuly a finie but waininh dey when muour, theter kide. Ivole an hour hefor s-reabfarth ro the fovecrurlir quarn thene near ley. The civbaxim is woinderfuld blu hue ot th athete sabs precicer above ticuce with us.
Pm on went by zail to the funcetin Foaek: fare, voinstint. 25 curs nae 20 minuter tenue? then tosonue vors a nile wese dfite town but did not bied anylur 1, roke. Them back b thire at chathouse. Evenus bime or wamm.
$23 f u l n$ a warm breghtidiy $\otimes$ the girlobon Thunday tray tolaid did not come over in bant did come to dumue at 6 and ment baek at 8.15 .

20
24 fuly Inve wol breige this Am owe Frian wactioto the Bluff of the en splomb redeuvaek on h. Nr.roct. Fumir impinella ${ }^{\circ}$ Agimorica. Oin s walteo to hes mach turald Jarm woved N. E fotce house bur the on nreat thi had killes if most vejifatu Day got maruer at evews and we matelev boat piov the excurkion. boat from bie Ridean whi all the Ray rolaur berkee kat tateu at 7 am for an all day tip. me rrent fober lent tacy came at 11.30: the injat was slill or very sark?

25fuly a bight warm dere, athorne.
Lut. readir De ornectute $T$ Dorne.
nsfuly mplekcut. nrote Belle Nhbse
sonn! a fine but wanue duy: we diuns at kay drland icame back at 5 oclork.

27 Soly tu twr Fumeli fine moterboak mondar. Houtu inlaus lake on Natercoo Lsluis, enterco bes the a nearest chunne whi inot waikable at lowner. Alates of the River, leut its high mater all abuit hur now, tho. to long a rankter period karfint parsis. Thelake is a stice thut pwaker wieto recos *Tusher is many slune parts. we hai a very beantifue tail burn 9. 20 to 12. 20 . Pm warmer reve at home, eveun weny beantifue

28 fmly the sou was quix sparin Tresoay hip Campbill walcis of While going down the loig akep of divirs room peafse fuce to the brit landing - hat consederable swatinuts; she rent hack les the 12 boat evitother sister is law! I went aver at 3.30 founothe not ingused bow ke pace. Back at s + shent the eving on the kiajsie

22
29 fuly . The warnext day get whe wrux on the piagsa alnost all of the morun id ifternoun.
3 ofuly Jo Kingatom les the Misockquai at 8.40 to 10.40 , Hwe ma, mellie Emua dhip Prette. Theo the thone tolant Channe by the Fort M Martelto tomers. Fothe Mntish amencan totel to ordes disines o then by Traller to portsnovith $x$ hocie by the belr Sine, thus dong all the car racoliz in 'the city.' some quaint aed levise, $\sigma$ a very finl buck rententiary;
Back to a food dumu dt a foor thotel. Thew took Ramitrolly ride asain rgot off at fort ot Pruncers If fur the Boat which leftat $3 \times$ yot hue 5.10. The boat was mett crowides.

31 Auly Iotar blant + dineco with the Friay camplells' home at spm * evem o callet un br tinclair

Ang! atborme ace oay; \& atdime Sat. came nuelie $\rightarrow$ the two Campalle y Mer Thr Marpiuglean thein English teit ficud. They mevit at 9 DM
The afhencow ran carler with northe Mines.
and 2 fnuiar: callet on Drtinclair Evirly in mosuries of at roorn to the İEani to dime monte moclie Thome s MN.
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Aup't Fuedoely: ff Lawecure Riven boat hor montreal b- T. $10 T_{0}$ $6.4 \mathrm{C}:$ Parth cowint far bax mo naiv: chaingei trato, ax Prexcole onr ber voronto' beinctoo large

24
易refurm thino the cancot anglf alro thoumak mine firmex an alro thourde many zean
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any 6
 damm plamfrew heas in the raim Tbowek fo isfinvto The revelis at 11.15 . Senisinge Rostum 4.40 .
any 11. C. E. Fradorgn heu is the vere Reserviatu panka fag kin tu Resermatu. Aline marme ines
"LNO 'ヨПOONVNV"


Involy
It anq 1908, with C, $\varepsilon 7$ rad taf tork 8.16 train at Becek bay for Dover va Next Roxburg. Marke firot the boiling string cold a tee t a novelt rio to both of then. Plenty it Ramurculu a natili var theliofluphlus in the broot thimy: Thes dy traeprace of tw the Malfole time at comity tr bono toos fuick ar. Prmos cuneata thenk t bluberrin to eat, the A Prook ave wia nortt ofe hav emmeh of the miel Punt un a mbluff ho. fotw poin and by Ramlius faim cormer 备 Incerda B Mer tae larqe pee pand an Remei mowe o there fork the Electivean they groing to Fonet kill जे geteiv of ak Broniand $t$ ley 3.10 traius $\%$ nateakow + tirun ley 0333 Cauton Electrie
Fot corcus apleqpia a narrow fonm fromecu: ani aecr reforma war Andertative Tommuelinu escase. dry hot, lut a breese.

19 Any. Woth C.E7Fher bhore 8.5 , to dexuytom: with hel tothe duamp baele flis worse to find aphedm ver Trncoricamin but the woos have ocen to rueh ont off on aceoint citu Grobuy mote ur. 7 hathar work frepeate anylluig: we brought baek kowever a bew frozes Wh are doubfocely The cormus birol hue have noter CEF llmes is a Aybrid
The onle wres loush of that hybriel the Kuows: we came bacle frow."the aet zirl site ou the Ned" Pridge" Farm ley the woid. Tiugher Card. Had cupt fitea regla st f grabe whe i took 4.05 hain.

1908
Billurica
25 ang
*Tuddlesex Canal
with C. E.7. rw. F. Ther whorfr antfe lept Boston 9.20 tiv wilmitor. followed alowk the canal an wert ride of kR to Lubber Prooks near filver Lale statwon ans had lumeh mider thate in bastuce puat beyon. a otratel of soo ft ilength has vater in real amoterdau farkion tuade a vers brett pietur. Then ley canal $r$ begluvar to the stone alewment carryins The canal over shawslinit Riven, there ace forty for or of carefult luid biq otoree not cennerkes.
wackew ly kiglivay to the centre of \$ 2 llisical, cuther it a bit or highway bir enticuig, a word noat on wrat rider street fust beyous the conretem o the kacth leats by a beautitul shring of Bresh clear unater. Fithe velluan bluared us ull testecuale forn face cinilt 1 it $\gg$ ago t a amptod invrreu buchetaet

30
By Elcetien thro Benfred texnitor

1908 South Natick Oover.
2 lepk, woth C.EJr astiff by 9.20 trin to latiek: racked two niles to foutt uatich:after and there taw the Eliok dak and another more beantifue one, not quite solarge is leit with no ivederce if age the shot a bab leat one very large limb upheld by wor chains: the other an the heghroad to Doves and in a grasoy jaid ofa house har a threade if 98 feet.
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32
merat̀ clowds: had wer buvel $\therefore$ chetfens blace by the nxyor in Then orlonciel alouly he borree I to dozn to tere proa, Hex Rawew be a beautifue 'rack to boren, then back totter bug ffinnúg. fov a oriuk D alving frimin dabe fo ter be ted whereh trerece bect aqoin to the 3.50-Mraic ta 3 ostere.

1908
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peripen obeblir var Terioy lita
hav bellerthy ichal tha peecresess

34 Neymonth break Rond Buthe 8,43 trainitiso Noypnowt

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The hughway r gaing towas Nik atate me tan tiru redet of wile gece Klying vouthivand all in the AKM. atonce ot Alying clone togethe this borkerid an earls vinter according tuthe farmess. we got Alaliakia aij Aprchonbora macrortachya Home no them limits pir bote of 5.17.

36
 t M Ceicurele dm dideleton for oven nigft. $\Rightarrow$ pot pard minuge fo monotac.
sponk io sameouia next money rgot quarfer at mirs onngas colloope bateronse in vielane r inder the bines. Priner, the bug hemefouslano Ang véret ench us saily.
verr hot one, ducoxic, no hain in brecefs' o Thr Cheney the aldert (f) years) in haberbut sam hao comin in wrell 60 Hean ago When Carruan tinsouter morntain ale. bromuer of 7 on fugar bice you carce bee to zeud ab muidmight saptreat no the blase we coued not precele in the Doads tuxt 6 melur deets no wrens ot any monntarur thodorer canue sat the ob 立, we wneke turce for roobler twase fortu Jorest kelle horese ro bok dry Tro basxurer Tor-ris. ander pethe mueling fith arexers. hars owdley then invait tap a gornd truese touele
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381908 Deef River, Saybrook Coun
oct 4 left hostom 1.03 Laturden nith
survir. Ao Ag Metr inconk o arr at Deephiven buke at 5 ocloek. The rullaqe prtrotel alt ee nile另. The RR shation 1 Refore surfer malke a mile nonele info eherter: one verng fine aed homse vitt binc of lass swen doow. An roatride Formed. quike abuntant bust reotin blower funcea filamentopus. bhouin llow far we ae bo Rosife the River qowai ho samex R dines ak tokel theze rhak in the hill noa aro forn to $r$ over the hiel so the mext pothe Come Traix Envuren assor. peain onchaco, whun pre could ree rom' after rew of irmonnable beacte stecs. abot 15 miles newle The those roai differim nich po the hile noai zu refetat en fonneer frequionst cormpts Adilumthun rotasery snow odd Rom velutwa kyban manh at ucat A Prextersu

Brook an Alimaceven mntanoin leaf called hy a chied near by the trone Lill. Betula lenta, Zuercus Primes: Redicolain lainculates. two form Vibuim acerifolew:

Ten-fiell natit fassaphaw; fine (finert \& ever raw) Hreer' 1 Tebuximm Lentago.
bentrana crinita
Carey empuleforwí partavele, fine sery vertici-llata

The Peoccuturis lanceolata wan in damp blace by roabsede in Eskex apher passin the brook rumur into Falb Rwer cour on map, saftes passur the sign boan at edge op Brook sayiu" Deep rater Dancyer: and on East side of higliway-

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 o Record ofice: \& took care of yesheroun plants $y$ then te the offce * woth IM hkort raekit $u$ h do the great afth. onchard a oorrei into the. Hemeork borae ley the Elcetic lyht power bleant. This poirge has notbeen cut oft: nas wet Reepy bauk faces the noritt $\%$ shoried be an excillent rolace for hortherm plants. We came honc to a 12 oelvek dimen Am mur prom Noekien by the noteh poad Chester Thonu be the eleqaint bed house he a omier dat even Thhere Murs Poratt eives: \$ also dug $x$ p three roofflants q) the Gucea freamento fe promy in the hank there. flis phreed alow for ray 125 feet. Ne got home ot 5 scelote after a very interstiny raek in they
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He many week feet death attaek But Rervent Mrayer kitat him baell kis baich Msakince 'twas to try of learu ns tounto live of die Naving the hunge o facth sove * Reathers on an haly dove The Gids this mreteket wored adien t Aunptly up to kecaren Rlew distune mot then kis freenudust mith cencors that are most ingmost.

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A chont dextance from the marerard in the Rowlder niti irome Fablet fortue the Fravellanthat fale Crelige mon hereRoom 1701 to $171(4=2)$
he divet at anced funce fieted uph on ar ansfornobite resort vtravice a moat noonderfue cu* Ceaves Daka acer saceharmu o var liceri Stwas 10 st of theat aned 14 Ht 8 in in dearneter and ito pensulou branche neng beautifue. aften ans brous checken me naekerfor the Tuntes a viritur a baatue file $x$ frak the 4 oelk trem her heurlkaven.
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the lift atoit in hewttavento visik Nulford Recordo, \% ve canne back to Boston ler the 12.05 arr at 4 ? $n$ ? the reather veng beantifine our Whole trip.

441908
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act 27 wot Walterfaxous me Whorfe br $9: 27$ train to praintree + vosinid Fakon Farn, the ded house no lonyer there, burnt foly 4.1906 Then ber the ' 1 ed zows aciosithe brork ol to the dixusid 2incay Reservisis, now a duck thook un place of then thro orr wond, $火$ road Pback to rtateon: wem Tremmonit Fo Roc KCans $\rightarrow$ tront abuytou. mackeo theo Cemetery oे beauthful bun grove nean poud coutaun Hown or bureded tanbet ouel but not resoquyed as a Cemerer. apedye of the regulur Abunter gemeterr turni yucen bilamentosa escaped $x$ gronic as at ERex canu. Thear: abuytonshati sonu kelf dozen pésmit trus moth uarinale muts of indiil O Yoak opecimin. Howne by 2.4 atran to akington
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with C. E. Fuxiow Mur whorf went ont on the $\%, 20$ traim vain the fivest lat of conifers t ever had the hnvelige to examum. C.ET. hav tangevts luele fhetile i/ thew as rechminter from the Nife - charuy of k bunneweel o he tiivols fave it to me to aod to m birtanual pumpklets. He bringht baele Reireae: ckevimerr, Mer Ataffice-is the备ardmer, + o bracyat one ppme bainkunca of am a tace oroopun brassheo tsee near the rvail. Hee came bacter the 2. 13 train hoplus to po aquin some ray.
nier d'Albe.

## 18760

DISOUSSION AND CORRESPONDENOE
EARLIER REFERENCES TO TIIE RELATION OF FLIES TO DISEASE
In the last number of Science (January 7) there is an interesting note by Dr. E. W. Gudger on Edward Bancroft's reference, in 1769, to the belief that flies transmit the tropical disease known as "yaws." It is not generally known that as early as the sixteenth century there was definitely promulgated the theory that flies play a rôle in the transmission of the plague.

Dr. Josiah Nott, 1849, lists Athanasius Kircher as among the earlier writers who believed that insects served as transmitters of disease. Dr. Kelly, in his fascinating volume "Walter Reed and Yellow Fever," goes further and quotes from Kircher's "Scrutinium Physico-medicum," published at Rome in 1658, the remarkable statement:

There can be no doubt that flies feed on the internal secretions of the diseased and dying, then flying away, they deposit their excretions on the food in neighboring dwellings, and persons who eat it are thus infected. ${ }^{1}$

Unfortunately, Dr. Kelly's translation stops
${ }^{1}$ Apropos of the present-day belief that bloodsucking and stinging insects may occasionally be direct inoculators of disease germs, the following statement from the same work is of interest: "In a recent plague at Naples, while a certain nobleman was looking out a window a hornet flew in and lighted on his nose and stinging him with the sharp point of its proboscis, caused a swelling. And when the poison had gradually spread and crept into the vital organs, within a space of two days (without doubt from the contagious humours which the insect had sucked up from a corpse), he contracted the disease and died."

## fucy 24.1908 SCIENCE

[N. S. VoL, XXVIII. No. 708
species of insects, is expected to supply valuable information to scientific investigators and to give guidance to the different administrations, by indicating the lines of advance of the disease and the districts which require special protective measures. The duties of the director of the bureau will for the present be undertaken by Dr. A. G. Bagshawe, of the Uganda Medical Staff.

## BEAUPERTHUY ON MOSQUITO-BORY DISEASES

Dr. Agramonte, in an article quoted from the Havana Cronica Medico by the British Medical Journal, calls attention to the pioneer work of Louis Daniel Beauperthuy, born in Guadcloupe in 1808. Writing in the Gaceta Oficial de Cumanà in May, 1853, Beauperthuy says:

To the work 1 undertook (health officer in a yellow fever epidemic in Cumana) I brought the knowledge gained during fourteen years' microscopic observation of the blood and secretions in every type of fever. These observations were of great service to me in recognizing the cause of yellow fever and the fitting methods of combating this terrible malady. With regard to my investigations on the etiology of yellow fever I must abstain for the present from making them public. They form part of a prolonged study, the results of which are facts so novel and so far removed from all hitherto accepted doctrines that I ought not to publish them without adducing fuller evidence in support. Moreover, I am sending to the Académie de Paris a communication which contains a summary of the observations I have made up to the present, the object of which is to secure the priority of my discoveries concerning the cause of fevers in general. . . .

The affection known as yellow fever or black vomit is due to the same cause as that producing intermittent fever.

Yellow fever is in no way to be regarded as a contagious disease.
The discase develops itself . . . under conditions which favor the development of mosquitos.

The mosquito plunges its proboseis into the skin . . . and introduces a poison which has propertics akin to that of snake venom. It softens the red blood corpuscles, causes their rupture . . . and facilitates the mixing of the coloring matter with the serum.

The agents of this yellow fever infection are of a considerable number of species, not all being of equally lethal character. The zancudo bobo, with legs striped with white, may be regarded as more or less the house-haunting kind. . . .
Remittent, intermittent and pernicious fevers, just like yellow fever, have as their cause an animal, or vegeto-animal virus, the introduction of which into the human body is brought about by inoculation.
Intermittent fevers are grave in proportion to the prevalence of mosquitos, and disappear or lose much of their severity in places which, by reason of their elevation, have few of these insects.

The expression "winged snakes" employed by Herodotus is peculiarly applicable to the mosquito and the result of its bite on the human organism.

Marshes do not communicate to the atmosphere anything more than humidity, and the small amount of hydrogen they give of does not cause in man the slightest indisposition in equatorial and intertropical regions renowned for their unhealthiness. Nor is it the putrescence of the water that makes it unhealthy, but the presence of mosquitos.

It was to the Gaceta Oficial de Cumana that Beauperthuy seems to have written most fully, but he made more than one communication to the Académie des Sciences. One of these, dated from Cumanà, January 18, 1856, is entitled "Researches into the Cause of Asiatic Cholera and into that of Yellow Fever and Marsh Fever," and in this he says that as early as 1839 his investigations in unhealthy localities in South America had convinced him that the so-called marsh fevers were due to a vegeto-animal virus inoculated into man by mosquitos.

## SOLENTIFIO NOTES AND NEWS

Oxford University has conferred its doctorate of science on Dr. F. Raymond, of the IIopital de la Salpêtrière, professor in the University of Paris; J. J. Harris Teall, M.A., F.R.S., director of H.M. Geological Survey; and Jumes Ward, ScD., fellow of Trinity and professor of mental philosophy in Cambridge University.

Dr. Birkeland, professor of physics at Christiana, has been given the honorary
to mathematics covers almost the whole range of the subject, from arithmetic to the clements of the calculus, required of our engineering students, there is nowhere any reference to students of engineering or to any other special class of students. I might, therefore, appear out of order in speaking of this report at the present occasion. But I wish to say most emphatically that, in my opinion, there is no special "mathematics for engineers"; nor is there any method of teaching mathematics, specially adapted to engineering students. If it is wrong to present mathematics in a form so abstract as to make it unintelligible to the student, it is just as wrong to present the results of mathematics in a form so concrete as to reduce the science to a mere art of performing certain mechanical operations, to make it, as the saying goes, a mere tool, and not a habit of thinking.

In conclusion allow me to say that I should be the last to advocate a remodeling of our institutions of learning on the German plan, or the French plan, or any other existing plan. But I believe that the time has come in this country when one or two years of general college study can be demanded as preparation for the professional engineering course, at least for those more able students who wish to obtain a thoroughly scientifie preparation for their professional career. An opportunity should then be offered to students of engineering of scientific ability to extend their knowledge on the theoretical side.

## Alexander Ziwet

University of Michigan

## THE BRITISH BUREAU OF SLEEPPM多 SIOKNESS

Tire British Colonial Office has issued the following statement:

At the instance of the late secretary of state for the colonies and with the cooperation
of the government of the Su Royal Society, his majesty's gov decided to establish in London the collection and general distri formation with regard to sleef The Royal Society will find as for the bureau at Burlington $H$ fourth of the cost of up-keep wi the Sudan government.

The bureau will be under the trol and direction of an honors of management, appointed by a to the secretary of state for the , committee will be composed of Chairman, the Right IIonorable Ridgeway, G.C.B., who is also the advisory committee of the tr research fund; Sir Patrick I K.C.M.G., F.R.S.; Sir Rubert ? Dr. Rose Bradford, F.R.S. (re Royal Society); Colonel D. F.R.S.; Mr. E. A. Walrond senting the foreign office); M $\mathrm{M}_{3}$ C.M.G. (representing the colon Mr. R. Popham Lobb, of the ec secretary.

The main function of the will be administered by a pai be to collect from all soure regarding sleeping sickness, 1 dense, and, where necessary, information, and to distribute quickly as possible among the gaged in combating the disea cations of the bureau will be ( categories, viz., scientific publi for those who are engaged is or in carrying out medical a the infected districts, and $p$ less technical character for th ment officials, missionaries al duties involve residence in One important piece of w preparation of a map of the Africa, showing the distribut and of the different species insects which are suspected A map of this kind showing extent to which the distribu coincides with the distributi

1909
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fan 11. Drove totte 9.15 train for C.S.7axin iver ahorft.
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tier Alvies Pinsaso the onls one turwn to bee eingin in thin meighborkaras. and the Cercidoplyel. a ven Fine Akee.
his griew horke ring neat $x$ wott pravel stoner ar at leydun. nee cunve krne to a 1.30 emieh via nueton vilese relectwe to ruattaiam honn. Ther nuevit back ler tolo Elec: Day pleasuntt + gerto hracticiay.

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1909
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56 Thingl:—Mouse
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maf 3 with C. 7 . Mrothrorf Mrache Iakn do Kemdail truenstatern * waiket to lleatore: ainnusethe livire ampienk cemetery witt its tine tress, othe prantextoue heth chiroure isse fithe wose arrceru Apposite it is Concoon ff the Bazsed Merrium \& $T$ 3 me tmant meltens large houve aNtie sindbuy peat ciowser Befrer reacler merreau of \% nuar cherry Biorete RL, stafiou are true pime yorio opts hur. Leo foken new biak fiocuse. mot apter puosn the F Parominc qoot $9 \rightarrow 1$ ancaul vir limened Ruveut anto urois on-horoth Rete of tiai prare are sonu. very lange מimet, tue $q$ 使o meher in circunfreue mothen 9 to 2 incact so abt as laus on pome at Atindac N. A. a tharts ohcmet knwth next ithe lygar one tur Vaw the kinds. Thence along the peried then mives to balinition pons tho thivim Exime in a suf ghode a cord breg benide the en Bewek Rhroce - Kariz Carieina

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$190 \%$ Brandow l\%
217 Frday, veather ofill mastest \% cold. at home in anc ami eve drove north arving tex nest oqname norte o Where me were foxtsar, thur gettin evectin the town a keccerter: Canne fo $\varepsilon$. foll, on the rome at tie vouth of the nuw squaie, $a$ to by perkiden, Snall pand: awn oriver sam the maf is evrong in callur the Eavkul bow Burniel powd, then name belongs to the fonis near ter road we paosed peoket vagain to vuy. gobem. ferkile Eqnisekun atsame font as juoturday, ofterile mes oich is $E$. arvense, a pmall dilccate toxn'. also one sank blue rolet. roh' $f$ am not puse 2 . cold whios or lizele of her dome

22 Thay. Ran clowed olery Law Hher $5^{\circ}$ ane red fellozes thei neopmen pais the war lowking for a thaw ai- onne iw ains. hit look ous inve in lim across the trailnow atflaction Then aver Dtec Crecte to the for fittu ledar nill erell shown on the fecrver map then roun the hice orive comas oult ou the Ayde Monur Pvat an Itu Cesar wimamla Thonue be the tragen well, the reews were fime The batany worth a loccigertay. vers large tak froquiverquines - İmpern couvú mattu a peat brwe spot dev/s o 12-15 px riride.

23 May fimery staid af horme alldecy
$62^{190}$ tyde Manor
24 may 1909 . This tuy briegp, the onle sungertion if oummer we Rave gestrad Simman arime bulu Not rovith. at 9 we atanten
for tupde mamor, over bonme roud an last jear: In nueabow ditch lefoce reachn alke creak a lange boelowsetemno Rammeubur drove thro, sudburn, nowds all posted por Centoer mat ito buceed 5 miler ker houn in the fown-. Are kyde nawor at 11 delock Thad huvehat 12 G anray at 1,30 :charger* 3.7.5 Lot so me frue Trecluin granoifim at the Jamue last peser thill sede TCame home ley tonsforciakins $\checkmark$ Bure Porio pro forver the fills thetere ottecrete nuciors, T antle the brizen prell pard.

is thrown into diagonal folds, but seems to preserve some of the muscular contour.

On the tail of another specimen of Trachodon, from the American Museum Cope Collection, the entire epidermis is covered with flattened scales of larger size, nearly a centimeter in diameter.
This disposition of the scales into the larger pavement groups and smaller tubercular areas is unlike that observed by the writer in any lacertilian; it appears to be unique. In a second paper the longitudinal and perpendicular arrangement of the clusters will be more fully made out.
Mr. Sternberg has added another of his important contributions to science through the fortunate discovery of this unique specimen, in a geologic region which was very generally considered as thoroughly prospected out.

Henry Fairfield Osborn
BOTANICAL TOTES
SHORT NOTES
In the March number of the Journal of Botany R. F. Rand begins his altogether interesting "Wayfaring Notes in Rhodesia" which remind one of the notes made by the traveling botanists of a century or so ago. Here one finds morphological, ecological, taxonomic and critical notes delightfully commingled.

Akin to the foregoing are the notes on English plants made by Matthew Dodsworth, a seventeenth century botanist, now first published in the Journal of Botany for March, by the editor. It is interesting to note such names as "Wild Williams" (for Lychnis floscuculi) and "Woodbind" (for Woodbine). A couple of letters to Plukenet are dated 1680 and 1681.

25 mur: cied but clear day. Athome all am TAm bive thambrin minseff orvve us to Porent Dale a to Goskew chwreh bu a oteep poas o un brooks on eithe hand. Ther have ( $\psi$ are stile at work। pirt in ow vater buthe of the rulluge of Brandore: the reservoice is abt 300 fut above the villaje $\overline{\text { comer }}$ frone a nen trive bxoble: a kecow sukplementary reservic is bwelt in a cove of the hile not a high in altiture as the earger raservin. coed horich prives ate sacy



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64 l909 Brainerd
26 May Jo Mudalebur at 11.30 i dines with Bramerd. Dew most like Aummer, not acloud no wins. N'ave had no Ruch on mozt the afkerwoven tae Ar violets a studycy them in the beds bavk again

27 may athome chu: towte shortesive is pre to tofs of hill bask \% the eksecopal chureh deloo thuse where hur 7 ars N. in whario fo of cluceago is bvilding a road to the toto 1 the hile view: he kar latill bought the luns it is Elis Hear alos building a new $F$ stabler liowae $18+0$ ft frocet on the maiu ift here a live Eash \& opp the sotel: he were srivew horne ley naike wh. soon came dorn heaveg.
me merritt is the bownmaxts. is this fown

28 may showery all tur. At hine

2y thay Lafurduy tome by the 10. 13 traiu foom Brario in

2 fume Confow fong biton came oul 9,15 train with houk Blauchand plliestrmoter tot after he had lookeo over mu Rubi we fook car to-caution cemetinn o on road to Fwoker blace got Re. froviosus ot then in to flowghtoin or toak cans har Prvetthon qaim $a_{1}$ far m the s at pare took in (att 3 rinles) y wreted rack to foughtom ocgain: one. bund is rodidside hay trolloucd: we-got Rnben allylownm,
 be came baik hy cans, they gony in ton 1 gostore att ofolk


PROPOSED ITINERARY.

Thursday, June 10th. Meeting at 225 Commonwealth Are., Boston, at 1.50 P.M., leave at 2 o'clock and go via Lancaster, Clinton, Wachusett Reservoir, Oakdale, to Wachusett House, Princeton, for the night.

Friday, June lIth. A.M. to South Deerfield, Mrs. Rosie Warren's for lunch. In P.M., via Amherst Agricultural College, Amherst College, and Smith College in Northampton, to Ashfield, spending the night at the Ashfield Inn.

Saturday, June 12th. In A.M. over Hoosac Mt., or around it on its North side, to Williams-' town, Greylock Inn. P.M., via Pittsfield to Hotel Aspinwall, Lenox, for the night.

Sunday, June 13 th. A.M., in and around Lenox, and to Red Lion Inn, Stockbridge, for noon meal.
P.M., to Worthey's, Springfield, or possibly the Hazard place, Enfield, Conn., Willis Rockwell, Mgr., for the night.

Monday, June lUth. To Leicester Inn, Leicester, for lunch, and Boston in P.M.

1909
Sesuntore
Inly 6 Io d. with C.E7 mirdriont. cose miveurn fay: malki hotue smamay sivod borele ofte harrs qot Apecurvern so the Corucos Ferus: back to the house tir a culs rotea T had to let the trov fuccive. no wuleout av, pureb a big raim otorme burus dew betwecip ohorvens forthe $2 \div 42$ and i got 5.37 train trome fomm the sume dusty roads do when \& left in bla Maotwo

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70
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prin 23 rift 7.39 hain $x$ wris at 10 . fto Nilexar 10.15 attended to mu klauss: wluch vere in hire huess in in otint stroup Mamelu Baber corverp: tuy Rour ortisur kept brete well we centaiuly in mize defruste $\sin$ in oroterniy

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190\%. Land seceit drun.
27 any mir no forley (embloyeotay in ma lovey) oferth andin then hast where o hat hotapoer it have boug on bushil ficre Jincorly. miforley ever ou the la. ©. dovper Bhai a ha worites bor mentrowner i aloo foi Mur fletron moverkan 2o ryear cial The day Min Nung ratreak core nind wnid, i shoued have chozen, bit pacporler surs is not too much $t$ belter than a still \& ur for towivicy.

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30 ang wacter betw $6.30+8 \mathrm{us}$ Blue rice -toun road to torosie Pous , back ls soth upper enc doutah Whw gov Carex novac anglare * into Resemictiv road hive.

31 Xng wacker beker 10 r 7.30 to the club r usutco Hums Hancaus new lot wher cellar is all read to but the inem ho ukeup,

Seht makki bencer 7.45 to the Reser kead Ruarten Br the Neservatim Roab boeck. Ereseed Dexnudem nudefloin Gerarora wngrue a Bexula leuta sntes a Gunom excrececmer of new bud on Duall linio.

781909 Perrgatous.
Sefot 3. C. 579 w 7 came on the 10.15 mie pot of at beolcam hoad Trepent a tewthom in propitu sai lnmeh at tie fhrmog theu sown the putt + across brodk th the meatow Nrece t the Cantor Rrad of baete to Elein otatoon for the 3.10\% Boston: $v$ got offat Reue siel ame trovk electhe tome. got the yellow furixe var devcocarpa of mruus Mnnmuana on the canton roaireve: a breoh or thmub satuer Phan a treeon opposite wider githe nore Gone abmudanti, orcetiy. perhap the exequeral sethicim ztationc.

Gpts Sunday noviun unacticortatare topt of \&anco ie bexueen $5.30>85$ Hot a few tump. Bownereb coneni ou tep sidte arctorfatilylo sanue as Blue tiol uns in texe olden tince.

1909 Labor Dau
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Then home lezraivent hotel Road Yefoklies at nm Voae: cort Aighlant r Rantiolole ave * otot o.decurcen blo bra xamthitoli in the hem fock: it is ren lanfe ulp to tofot. then home at. 30
They beqiu wo nowe their furnitur fomonaw form 16 cheotinet of fothen new camborke bavize.

Dur Doctor
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80
Sept 7 . Soiner aro 14 ot Rearviles statiw at 10,37 + th ellis stafen. wackes alony nequrnet abict to Cantou. got specmmen pthe jellore fruch Prums urgumana: whether thes is the origimal Sevham stafin I dowde huow. had orer linveh of the road beyond the Anael ponar whi gue namiot Cansonny poud fo the oldeora to efel meaiow near it. Iumeoasiduto riait the peab
 mo hlartley's: met then fatter Hon, the formes meltary Edetor if the \&lobe. Fine bue woods as jou abproweh the hepouset nuesoow we tow the 3.10 Electre at canton $x-a$ otaill fodrimu at 5.30 of ment with Aial Fravieer tre the " nveddiup evkher thif tope Kemenmay, marryy Mur fohu Ruchaioon or PBoo Reime a mmique wit door Relo.

Lets 8 Beturum to ones 7,30 to tofo of searcevek io the murr road $8-$ doun to breat huele lodye. bach phomu bu Piservoten Rom

Septo massasong Fow m min maz mhork bur lu.ls train to Eficervin Neyts. on Pond sce track quins 8 theemmens oftu rare yelouwiinger beclerfly victarvonth. They are feyuce alow tee roul naw toneh puot as lato Fear on tept 5. The Ferias hsa has blawt edges to it zellow nimess. Me did nit domunctr else, but on the roadride of orenict collinsoria camaberasis in frent, wot a coumuon plant heréabouts. we canne back an the 2.55 forn freuzirn keybis after rusthy therarqoteur nurnzesies.

82 1909 Artalls place: Marren RD
Sept Ah Left on 9 veloek train with C. 57 Mh -NRMO f: ars Provedecu 10.05: took Elichic Mrain Fi station at $9.15+$ are Trarren 9.46 : 11 miles Gone glytem 5 ch her zone: fare 3 theketo
Forno man in atatrou who drrectio un to the blue reve waekev, foll, the otreit railway to the Briotol lime $11 / 2$ in ruat beyon is the eataxe of bur hale moth high wall lilee the lie connoting zrales: here ure focuit Devecale Pahanere trver - esh. ithe Bel kown like a buch with slm lewis thelonquing fotu Mlmaceac we mex the Laokeh gandemin ì charge ktho snkail lan kun deat serucal jear the beree is kift un br this banplifor Hirs Hame k heon
C. $\mathcal{F} 7$. trot opecnuen whe gardenergrame me forto Rudluy Gncof theert. Had anr linueh aktoke roaisich $t$ aver prow fros bhe 2,0 8 Rranu in Boaton of $\times 25$

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Monday Jasuasy 16.1860. Uornt to the Yerunq Meries Sept $\left[\mathrm{P}_{\mathrm{rapm}}\right]$ moining [A. Thampsinio church] in the surning. Games m. w. Hoall, whes is a Mnee ontiverns, alludes - Rede to what hapepenced lash Saturday urming and et ledteh uqquested parayes for 4.5 Kimnedy. Alas for mupelf. But he mentimes no names.
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Sept 3 c gine wionales
a wamu cubate. b b.k.presided.
voth: Ayes: Sraeppote, Dore + Vowtaps.
nays: Dram, Soley, Dillouram ans Tball.

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Sept 20. Drove to the Praintzee Ride of Rexembateon rea Lawent votch with mal 8 rescted the. oed fulel at end powncice Brovele path. Bal \&onue лropacum - a nuw Prassica.

Sept 30. Chvechile came on the 12.15 t fanco the Rraiu at Readvelle for Green Lodge: valkeo thro the Mraklewn Boad $I$ aloug Deihan, road or in bu Muf Fortee loure to Purgatory urood ist the shemper aloury the satt for He older ens r to to Evereted Thim nue us af the mook crocises tue sove to Rearicle for Dhe 5.14 train forkerd ${ }^{2} R$ (O, fomil one phec Palyoum hyonopker at the fom on mitole tho Rede vileete ff
841909.
oct? Fo bharow biyghts with tiwk FMag to cace on Rev $x$ Mirs Prumell: ther have a faim near hoose tice rclose to the barm stand an ded 7 tovn to zall deoayed awhy on owe side and tur dens lumbr ont tappers the reot efithe folcaqe. The butc othe tree is nof raiced own to the loss a Nubtánu lexithe circumfrrevareacled it
oet $q$ ler 9,15 thain to bevenm wites

rustie cottage cam for the le higluvay o then tothe beft acras chares piver agun wild mto nerfied : a ver wee fesse inaun Flace atthe oed mill site kives a brook brameh fittop River: pust hefore reaeluy the thocren we tall biner ont topkr the the other trees; after lunch ar the alvost deplected pors we bey ont the horse which lead m allaot to flop river meatous whew were uganily bietain * unharuessio honse les aper elfeg the wrodewis: heve me fount wohadhbapsct the béck to the twnst to

86
and guin headice otraegatefor the hareer of forkinnote 2 the or onned in the Anrambs was ory envoegh to do this. we arov ivere af theu, abst $1,5-4018$ tall inees: vue mearured severul, tis the Prat unar the larqésl lofeet " 2 ulie roreci at 3 fict from the pronuct.
two others were qft! meles one mas qoA 5 mebees
we" extimi"ateo, (lay a bärul_ $45^{\circ}$ angle the hioghterturn at 13 skeit.
we kept our acrons thesiverupy holeow o Cume outrear the cramberry kicks at the frot oftte noov inat Freak that back to the homse. we kept along bo thes rerp beavtitil road tio the zellow- bazeof a kra ru befober. fory malkel a mac bale, via Noon hier, of nooby noan haíic becm noturify cleares oft ly a hai fric a peser ago.



In taters mes. wat over-whiciny brow

Form No. 2 .
Cattle Bureau of the Mass. State Board of Agriculture. CERTIFICATE OF INSPECTION OF CATTLE, SHEEP, SWINE AND GOATS.
(Section 18, Chapter go, Revised Laws, and Chapter i16, Acts of igor.) TO BE GIVEN TO THE OWNER OR PERSON IN CHARGE.
Town of city of $\qquad$ Month, $\qquad$ (1) 7 Day, \& .190
I hereby certify that I have this day examined the following animals, said to be owned by
 of Liner If A Street town oretty of $\qquad$ $7 \times 7 \cdots 6$ Bulls, $\qquad$ Cows dry and not farting, $\qquad$
Cows in milk, .. Young, $\qquad$ Oxen, $\qquad$ Sheep, $\qquad$ Swine, $\qquad$ Goats,. $\qquad$
Fating, $\qquad$
$\qquad$
$\qquad$ -
Upon a physical examination I find no evidence of tuberculosis or other contagious disease in any of said animals.


This certificate is based upon a physical examination.

88 rid. Receiver from Anboretunn ponicita fork Now 2.1909 .


Set in gardeu in a Row akd a half. $1-X X V I I$ in first row $x \times Y I I$ to $X X X Y$ in secones rowt: and one frot apurt.
XXYIII oph XXrII anso $\times \times x \vee$ opp $X 1 x$ nove 2.1qog.

XrIII clematis
XIX Trachelonperum
XX Cotoneanter
XXI Cotonearter
XXII Syringa 22696 Narburtore
XXIII Larix daturica $2033^{\prime}$ Dept agric 432
XXIY Rhamus 2 plants
XXY Sarcococcea
XXY Cerasus
XXYII Lovicera Koehiana
XXrाT Philadelakus
$\overline{X X I X}$ Betula
$\overline{X X X}$ Sorbers aкeuparia Vommay
XXXT Poliothyrela
XXXII Tnores
XXXIIT Lonicera NTackic
XXXIV Viderea.
XXXV Dioskyras
nov $10^{\text {th }} 1909$
moved all the above to one Row. near the garden three tworns acacia hedge: 35 plauts each one yourd apart, aid nol begiuing nearest the 'tot bed waek, Tho 35 neareit the etruet.

90
Neonexday: 100 24.1909:
cold, athong torte nicis with two melues. f Now; and a oleety wiur all bap.
muedred is to days returinp tow her tip to Poubic RP: via Canabcan Pacific Pe furonise grodrowion

## DECEMBER WAS COLD.

## Much Sunshine Also <br> Characterized Month-Blue Hill Summary for the

 Year.
## Colder weather than usual prevait

 ed during December, with an abundance of sunshine and the average procipitation. The mean temperature of the month was 25.7 degrees which is \#.." degrees beiow the hormal and the lowest for December since 1!006. The highest temperature reached was 51 degrees on the 6th and the minimum of the month was one below zero on the "1st. More than one-half the pre(ipitation was in the form of snow, $\ddot{H}$ inches falling, is inthes coming Unime the storm of the whth-2th. The total snowiall was nine inches more than tho avarage amount and the greatest in December since 1904. 1.66 inches of rain fell during the month, the most in one day bring 3.29 inches on the 14th.There was about the usual amonnt of relative humidity and there was less cloudiness thall is customary. The total amount of suashine was Th per cent. greater than the average. There was more than the normal amount of wind, the mean velocity heing the highest for December since 190\%. The maximum velocity was 75 miles per hour from the northeast on the $20 t h$. The prevailing wind direction was west and there was a marked absence of south and east winds.
1909 was notable for its warm winfer, high wind velocities throughout the year and an excess of sunshine during most of the months. The mean temperature for the year was 47.6 degrees, 0.8 deglees warmer than the normal and the highest since 1906 . The total precipitation of the year was 43.29 inches which is 3.71 inches less than the average amount. This, however, is much more than fell in 1908 when only 37.28 inches were recorded. 1909 was the windiest year since 1897, January, September and October being the only months with mean velocities below normal, and the only months in which the maximum velocity was under b0 miles per hour were June and September.
L. A. Wells.

Blue Hill Observatory,
Jan. 4. 1910.

## THE WEATHER IN 1909.

During the year 1909 there were 205 clear days, 268 fair days, 104 cloudy days, and 60 partly cloudy days, Rain fell on or part of 79 days (190s. 75). Snow fell on or part of 22 days (1908, 20). There was thun(ler on 10 days ( 1908,15 ). The prevailing wind was west with a total of 91 days. The number of days below zero was $2(1908$, :3). The warmest day was Sunday, Angust 7th, 98 dogrees. Coldest day, Wednesday, Derember :11st, -2. Coldest day at 12 o'clock, December 30th, 3 degrees. First frost, Monday, September 20th. First appearance of snow, Thurstay, October $\because 8 t \mathrm{th}$.

Lewis MeHardy.

## Y, NOVEMBER 24, 1909

## FEW ZERO DAYS COMING <br> EVEN FREEZING OFTEN ABSENT AT THANISSGIVING

Boston Christmases Usually Little Colder Than November Feast-Only Two os Three Days Below Zero in the City's Average Winter-Cold Waves and the Price of Eggs-Some Modern Marked Fallacies Shown to Be Aged-New England's Climate Not So Bad After All

A change in climate is taking place very senslbly. Both heats and colds are becoming much more moderate within the memless frequent and less deep. They do are often lle below the mountain more than one, two or three days, and very rarely a week. The snows are remembered to have been formerly frequent, deep, and of long continuance. The elderly inform me that the earth used to be covered withe snow little study of the tables will show that the Christmas low temperatures are on the whole neariy as high as the Thanksgiving lows. Twelve Christmases out of thir-ty-seven had minimum tomperatures above freczirg, as against fifteen such Thanksgiving. Clear days number eleven, against ten for Thanksgiving.

37 CIHRLSTMAS DAYS- 1872 TO 1008
Temperature,
Teather,

|  | $\begin{aligned} & \text { Tomper } \\ & \text { Min. } \end{aligned}$ | Max. | Weather, |
| :---: | :---: | :---: | :---: |
| 1872. | -8 | 7 | Clear |
| 1876. | . 34 | 38 | Wholly cloudy |
| 1854. | . 26 | 43 | Clear |
| 1575. | . 27 | 38 | Cloudy, snow |
| 1876. | , 5 | 24 | Cloudy |
| 1877. | , 27 | 45 | Clear |
| 1878. | , 10 | 80 | Clear |
| 1879. | 14 | 39 | Wholly cloudy, light gnow |
| $18 \times 0$. | 29 | 33. | Wholly cloudy, light snow |
| 1881. | , 21 | 48 | Clear |
| 1882. | , 83 | 43 | Partly cloudy |
| 1883. | 24 | 34 | Wholly cloudy, snow |
| 1884. | 13 | 24 | Cloudy, trace of snow |
| 1885. | . 19 | 28 | Wholly cloudy |
| 1886. | . 18 | 54 | Showers, mainly clear |
| 1887. | . 26 | 36 | Cloudy, snow furrles |
| ISRR. | 43 | 60 | Clear |
| 1889. | . 39 | (6) | Shower, malnly clear |
| 1 Pan . | . 12 | 20 | Clear |
| 1891. | , 38 | 41 | Wholly cloudy, rain |
| 1882. | . 10 | 24 | Wholly clouds, thow furrles |
| 1893. | . 46 | 57 | Cloudy |
| 18514. | 28 | 48 | Cloudy, rain |
| 1895. | , 18 | 43 | Wholly cloudy |
| 1896. | . 10 | 23 | Clicar |
| 1897. | 9 | 29 | Clear |
| 1888. | 29 | 37 | Clear |
| 1809. | .. 80 | 45 | Clear, except shower |
| 1900. | . 凬 | 45 | Cloudy |
| 1001. | . 38 | 38 | Wholly cloudy, light ratn |
| 1002. | . 22 | 34 | Wholly cloudy, snow |
| 1813. | . 33 | 45 | Wholly cloudy |
| 1904. | . 6 | 18 | Tholly cloudy |
| 1905. | . 24 | 37 | Cloudy |
| 190). | . 20 | 27 | Wholly cloudy, light snow |
| 1507. | . 33 | 43 | Cloudy |
| 190R. | . . 37 | 49 | Cloudy |

Average of lowest temperatures, 24.46 degrees.
Average of highest, 40.2 degrees. Average of highest, 40.2 degrees, 32.38 degrees Hizhest temperature, 65 degrees, in 1889 .
Iowest temperature, 8 helow, in 1872 . above freezing.

## Fow Zero Days in Winter

Two features of tho Boston winter are of high importance to everyone-the cold shaps, or cold waves, which most of us Iread- the more because the Weather Bureaus sharpens nur shivers In advance; ant the February temperature, which governs the price of egas. This latier polnt is one of generally unsuspected importance, for it means many thousands of dollars out or In of the Boston household purses, and






ON THE SO-CALLED NORWOOD "METEORITE"
The issue of Science for January 28 contains an article by Professor Frank W. Very entitled "Fall of a Meteorite in Norwood, Massachusetts," descriptive of what he 'supposes to have been a meteoritic stone said to have fallen on the farm of Mr. W. P. Nickerson, of Norwood, Mass., during the night between October 7-8, 1909. On account of the specific character of the description and for fear that this may be successful in giving the "Norwood meteorite" a place in the literature, I feel that another opinion with regard to the character of the specimen should be placed on record.

I saw the newspaper account of this fall directly after its occurrence, and after correspondence with Mr. Nickerson took the first opportunity that presented itself to examine the specimen, which was then on exhibition in a "dime museum" in Boston. Mr. Nickerson himself met me there and showed me the stone. Professor Very's account of the appearance of the mass is sufficiently accurate, but his interpretation of it is entirely erroneous. As a matter of fact, the specimen is a characteristic glacial bowlder of a basic igneous dike rock, the matrix in which has been weathered so as to leave the characteristic large phenocrysts of plagioclase projecting from the surface. There is no surface indication whatever of flowage or of the skin which is characteristic of freshly fallen stony meteorites. I broke off a piece of the stone and examined the fresh fracture with the greatest care under a hand lens without finding any indication of the existence of metallic iron in the mass. Since reading Professor Very's article, I have had a thin section of my fragment made. Microscopic examination of this proves the rock to be ordinary labra-dorite-porphyry-a diagnosis which has been confirmed by Dr. H. S. Washington, who has called my attention to his description of this rock type from Essex County, Mass. ${ }^{1}$
Mr. Nickerson told mo about the broken bars of the gateway under which the mass was ${ }^{1}$ Journal of Geology, Vol. 7, p. 290, 1899.
found and the other circumstances as related by Professor Very, but he added a statement with regard to a bright flash of light which he had noticed in the sky during the evening of October 7. His description, however, was only that of an unusually brilliant shooting star. A meteorite of the size of this specimen would surely have illuminated the region over many square miles with almost the light of day, judging from the reports of known meteorites which have been seen to fall, but no such occurrence was reported from Norwood. If the falling of a meteorite was the cause of the broken bars, the mass has not yet been found, or at any rate it was other than the specimen described by Professor Very and seen by me.

The circumstantial nature of the observations made by the several persons who had to do with digging up the "meteorite," as quoted in the article to which reference is made, are not as conclusive to me as they are to Professor Very, through scepticism engendered by the falsity of nearly all of the many reports that have come to my office during the past sixteen years in which people have described "meteorites" that they "had actually seen fall" at their feet or on the lawn in front of their houses, or in the road, or in some other very near-by place. On request, samples of some of these "meteorites" have been sent in, one of them proving to be a piece of fossiliferous limestone, another a bit of furnace slag, another a glacial bowlder of trap rock, another a glazed stone that had been used in the wall of a limekiln, another a glacial bowlder of quartzite covered with a film of limonite. The list might be extended almost indefinitely, but it is not worth while. In almost every case mentioned, the mass when found "was so hot that one could not bear his hand on it."

## Edmund Otis Hovey

American Museum of Natural History

# Theteors Nomonet macess 

ward elastic reaction of the air becomes so great that the meteorite rebounds, but if the angle of the path is a high one, atmospheric friction and impact retard the meteoric velocity to so great an extent that gravity gets the victory, and the last part of the meteor's fall is vertical. If this conclusion is correct, there should be some evidence that bolides which strike the ground fall more often than not in a vertical direction. I am not aware that such evidence has been sought, or especially noted. The present instance is so well authenticated, that it seems worth putting on record. Subsequent investigation has proved that the fall of the meteorite occurred at about quarter before seven o'clock on the evening of Thursday, October 7, as witnessed by several people in Norwood.

Frant W. Very
Westwood, Mass.,
October 12, 1909
a laboratory illustration of ball hightning
In Dr. Elihu Thomson's address at the opening of the Palmer Physical Laboratory at Princeton University he made, with regard to ball lightning, the statement, "The diffculty here is that it is too accidental and rare for consistent study, and we have not as yet any laboratory phenomena which resemble it closely." ${ }^{1}$ This suggested to me that a phenomenon which I witnessed some six or seven years ago might be worth recording.

With a copper wire a student accidentally short-circuited the terminals of an ordinary 110 -volt circuit. I happened at the time to be a few meters from him and to be looking toward the terminals. At the instant of the short circuit I saw an incandescent ball which appeared to roll rather slowly from the terminals across the laboratory table and then disappeared. As I remember it, I should say that the ball may have appeared to be about three centimeters in diameter. I think no one else in the room saw anything more than a flash of light-much as if a fuse had blown. On the table where the ball had rolled we found a line of scorched spots, as if the ball had bounced along the table and had scorched the wood wherever it touched. As I remem-
${ }^{1}$ Science, XXX., p. 868, December 17, 1909.
ber them, these scorched spots were rather close together, perhaps not more than one or two centimeters apart. In the top of the table was a crack perhaps a millimeter or two wide, and at this crack the scorched line ended. In a drawer immediately under this crack we found a tiny copper ball, perhaps a millimeter in diameter. Apparently the ball that rolled along the table was incandescent copper vapor, although my memory of it is rather of a yel-low-white than of a greenish light.
The above suggested the possibility of a laboratory study of a phenomenon which may very possibly be similar to that of ball lightning, but I have never attempted to repeat the experiment.
A. T. Jones

Purdee University

## ball Lightning

To tife Editor of Science: In the address on "Atmospheric Electricity" by Professor Elihu Thomson, on pages 867 to 868 in the issue of December 17, reference is made to lightning in the form of a ball of fire. This calls to my mind an experience which I had some fifteen years ago while watching a heavy electrical storm. I observed what appeared to be a ball of fire between two and three feet in diameter rolling along the street. It was also accompanied by several others of smaller size. This appearance occurred just after a very heavy electrical discharge to a telephono pole some few squares away. The discharge along the telephone wire heated the wire to red heat. The wire broke on account of this heating and a section of some considerable length was hurled along the street with a whirling motion. The rapidity of the rolling motion gave the appearance of a ball, as it also gave a forward motion to the ball of fire. Subsequent investigation revealed the two ends of the wire dangling from adjacent poles with a considerable length of the wire missing. I beg to suggest that the rapid heating of metal particles in some manner similar to this may be the cause of many of the so-called balls of lightning.

Louls M. Ротts
Balitimore, Mi.,
January 10,1910


Teb7. Bramend came out 7 okent the night here: he ment over all miverets meludey the Prellongley vires, the oney addition wothe latten being "hat he made aure fithe 'rola soronia, ans changes blanda of the bist to pallens, und ancueva he conte to incogrita Prainerd.

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1910
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## ELM BUD CALENDAR

To the Exitor of the Transoript:
One can gain' a very good dea of the advance of the season," that is to "say, whether the season is early or tate, by following the development of some tree or plant and reconding the dates for successive years at which the tree passes the various stages in its growth. Such a series of obserfations -has been made by thel writer upan an olm tree by Jamaica Pond, for in perlod covering elght years,


By examining this record we seo that this season started on March '24, five days earller than the average, On Aprli'2 it. was thirteen: days early. On April 9 . It was ten days early. It then went to thirteen days early on April 20, and at the time of going to print it is twelve days early. This record seems to explain the disasters to fruit In the West, where the buds prematurely advanced have been caught by the frost.

Robery' H. Richards
Samaica Plain, April, $2 \beta$.

1910 Bopford
Afr 28 with $\mathrm{C}, ~ \varepsilon \rightarrow$ by 12.10 Ao geonerinn walke ber Bred pate bows $r$ Steven kon to the nillag The, Ro Boptrad stackou to qet 6.14 train to Boston Lemar all as beuntifiel ai when me firat vamit, ant virial recall the No bur pum child hood. The Blowisroot ura tuse in its prme Phe Amelanchiez avd Pmmes nigra. Everythif mueh aheat it fommer yeau. the had the Cuvel iv the pot of a lume dell protected fr. the coled horth wiist? mell manmubly the orillinnt tim. Groughr back a few Herbarum dibeermienan the monument in the Cemexiry are Ed MMary Pienci names but res date of birth or death. The graves are in the cemetery near the village chwreh wot in the oedercemetery. ou the other rowad

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## 14omoranda.

Bag should not oxceod the following dimen-sions,- 5 inches in thickness.

## Goggles.

Headcear should bo cloth cap or soft felt hat. Stiff hat objectionablo.
A thick overcoat or a thin overcoat with cardigan or sweater.

## Itinerary.

1910
Fri.June lothe Ascomble at \%225 at 9.15 A.M.
Start at 9.30 going via Loxineton, concord, Acton \& ILttileton io Groton for Iunch. ( 38 m.$)$ P. 14 . via Tovmsend, Ashby, to tho Ary at Jaffrey. ( 35 m.$)$
Sat.Ilth. Via Dubifn to Walpole Inn for Iunch. ( 37 ri .) In P.M. via Claremont to Viooastock. ( 45 m.$)$
Sun. 12 th. At Moodatock.
Hon.13th. TO Dartmouth College (14 m.) Darly Iunch, \& via Wells River to Franconia,

ゴนา 27, 2910.

Wod. 15th. Via Bretton Voods, Crawford Notch, Pinkhari Musch, to lit. D adison Houso, Gorhan,- Iuncining on routo ( 75 ni. )
Thurs. 16th. A.1. to Paris Hill for Iunch. ( $50 \mathrm{~m} \cdot$ ) P. 1 . to Poland Spring. $(22 \mathrm{~m}$.
Fri.I7th. To Tho Roskinchan, Portmouth, Or Sawyor House, Rye Beach. Lunch on route. ( 90 to 100 m. )
Sat.18th. Via Philifps Acadomy, Exeter, to Bald Pato Inn, Georgotom, Zor Iunch. ( 30 m.$)$ P.H. to Boston. ( 30 m . or more.)

## ฮีทา 27. 2910.



 of thmos at Boz Poto Imm man wat padd sox out of tho ciub tarocomury


* 1 0.worine 1 *


Thme of onoh : mmbern 356.00 .

$116^{19 / 0}$
20 forme: a thotorive ith Ractils trought from For st \&R some Pubers, a timall. huoh or 6 to 8 blemeler. cane, 3 ffin lungte ax a $4^{50}$ angle unttu the pond


24 fane have had oeveral deys of extrome heat: an East cuint came last evemir + temp. Thi ahm: bo walked to tos Blue thic doun bath on 80 Ride to Areled St: did not fiut a sikaris lihafolia but saw serval Thuge ani on raxd pactu turn frong thro miescat noteh found a new atation for Cormus eincimatis Whi pleareo ine as ithare couked in vaim for do thes sturen in ito Rex placer on top proth fiel, so ran aplunt is notis two sewi-the reas likels tube cut oux at arutime. canver bucle thro bieo catwateh ralong the Reservatema leat.
2.5.me. Iork 12.20tr, at Rearule for Ellin fojoir Mr Robt.a. Mareis Botameal parter of the abdalachians 15 people: Mr Thur Endicott on cantou o their taughter mors. Prilde hws brigg is Nuwtore, who toed me of a yry rar Not Engincer hes vear S. Dancell levers on thartford Ar Guestivot into Kuovn the sure oflowen weel, x Ine ingrahain. we went theo Purgatore the regnear rauk nany blowiown on the pate mit qair of sieritt fo, no thac the road is not passabee for Teanes: the big doring not visible: the rurface oncl of Hemma polipkizsice. No Mare thowed me the Dlemtaria deblyele arob Mr Artehirs plantur x a aich Jrillin opraciofloza mar also near luy.

Ure cance out Trashlurn Rive to Grcen Ladje fu the 5.14. tent Dincelan - Prsulla carne in the anto - took rue home. very clear * eroe s-ay.
 injured.
The annual regatta of the cake Champlain Yacht club, Burlington, will be held August 2, when there

will be races for all classes of motor and sail boats. There will | $\mid$ valuable first and second prizes for |
| :--- | :--- |
| all events, aggregating a cost of | all events, aggregating a cost of

$\$ 2000$. The first prize for the grand $\$ 2000$. The first prize for the grand
motor boat free-for-all race will be motor boat free-for-atil race $\$ 750$ cup. The entries close August 1 .
Articles of assuctation have been (fled in the office of the secretar, of state by the Poultnas Toy Co..
of Poulther, organized to manufa:ture and sell toys. The capital is $\$ 5000$, with shares of $\$ 14$ eack.
The Somerville Luraber Co., of Sot. erville, Mass., has teen siance: en-
mission to leal in all kinals :o lumje: in this state, also the Cham-
Hatn Slate Co.. Mass., which win dea! in slate in

Thursday morning Sergt. C. A. Sandridge of the 10 th Cavaley, whu
lives just west of Fort Etian Alem lives just nest of Fort Etwan Ahem
reservation, heard someozo prowlIng about the bol:se. Unable to to wed only to asa:n be awakened by his wife, who also heard a sus1ixious noise. The sergeant sam a man about to enter his shed and fired at him with a service revolver
through the kitchen window, He through the kitchen window,
missed the mark but was not troubled furthér. He discovered at daylight that the burglar was after
coal and had already carried away a small quantity $\qquad$
The Masons of Brattleboro are elated over the fact that the entire $\$ 25,000$ issue of preferred stock in the Masonic Building association has been disposed of among the
members of the various branches members of the various branches
Masonic order in Brattleioro. The last of the issue of stocia was disposed of Thursday afte: for immediate use in the remodeliing of the o Conn $r$ house on Main
street into a Masoui: clue house ?:
contenplated and the work will contenplated and the work vill Le
started as soon as the pians are re$W^{\text {'ill }}$ be within a fortnight at the latest.

Wim Bonlder Attracts Attention. A. larse boulder that has recent Rount Mansfeld attracts mach a tention from visitors to Smugglers
$\qquad$ is partly burled, and is about 16
is fee in its other dimensions.
tis tha: are strewh ore: the ralle
of the noteh surpass it it size. Tie
blace $w$ are it leit its led may
Mansfield side. Is path, about a
rod in widt:, is sweyt clear regetaticu, and when it crossed the about 1 th fect dees. Seven or eight sliadher boniders were dis'odged in
its fall. Two of them crossed the wamp oner it. The road has hern
revsices by he town of Caubridge fant Messifitan
field Hespital.

trustees of the Brattleboro retreat


Le: Ent: is if years old ani

on City hospitals ana was lowen
rivate martire in H iyoke, Mass.
he became resident
he became resident Mhsician ant
superintendent of the Holyoke City
hospital for a year. Lately he has
 sotaists from Four states .
Threm Dars sassien at 13 orm-Emik-Many Lare Plants formu - Memberntif, of Both Vemour Butanical and Bird Cluts but creased-Winter Meeting at surlington. Aboat 49 reppie, inciudius st... ral botanists of note, attendel three days annual meeting of the
Vermont Botanical club and the Vermont Bird club at Moodstock this week. The Botanical club has seldom had a gathering when more rare plants were seen and the fact that there were more especial feat ures than usual to the program made the meeting an esptcially esjoyable one.
The party gatherd at Quechee Gulf on Monday afternoon and explored the almost perpendicular
cliffs, which tower nearly 200 feet clifis, whici tower nearly 200 feet
above the river, as well as the river bed itself. Among the plants of espocial interest seen here the gorthern woodsin and the smooth woodsia, terns usual!y growing
semialpine regions and found only athree of four otber riavis in Yer plants of the lower orders were also colecited. In the eroriag the nataWo dsathe'red Ats and Cratis ciou an insiectod exbibits of Anfed and live lants, kirus and mawiogs from Nature club. Tucre vas a shm its
 and hearly as zan: it the Liel
Clels Entertained at Lunch. On Tuesday moming the membeas of the two rermont clubs is hected with the Bilings
Here veaches, grayes. figs an 1 otto fruits of rarme" climates
rave to perfection unaer glass. flowers are in profusion and uracti cally all the interesting Vernion: ferns and wild flowers are to be
found in spots made as much as possible like their natural environment. The Billings carry-al the party to the top of Mount Tom, where an excellent view of the surrounding country was had. An elab-
orate lunch, served on the piazza at orate lunch, served on the piazza at
the home of Mr. and Mrs. Frederick Lee. was next in order. The after in Hartland, where the party went in automabiles. The principal plants of interest at this polnt were of the
cluy moss, Lycopodium, type. Some species of heiatics nevor before re-
ported for the state were discover ed. The nests of a number or species
 and Mrs. A. B. Morgan, nearby
a:d enjo:ed a nicnic lunc.
In the evening a free lecture wa given at the owera bonse ow both and the theater was crowden. I speaker was N. L. Briton of th
New Yown Botantal gardens, ons Moncs auticrities on Nort American plants and an anchor ante. He showed about 1 no socre
views of planis taken from natur
and spoke briely concuming themp The photozrayhs from whic?
slides wero male were taken ing a lense and developer whic To rld satisfactulis bring ont th natural colers of fovels.
On Weanesdar moming. day of the meeting, the naw drowe is a station for the mate forn (Asp:it ym fare in the United Status ing found east of the yiseissib, river excent in this oue litule cirn anold a hylmith between he male frr and the common mancual shie baforn fornd



 societs, Dr. G. G. Kennedy of Fin ton and Mis

The Vermont Botanical and By clubs will meet jointly at Burlins
ton in January when there will b ton in January when

1910 vt. Bot club-mextines Proodspock ot.

Puly 1. Woth Nuik Muad left is at 11.30 "arr. Mmpdotack abt tio min late. Sod roomen on Hice foom of the 2 mu. looms \&ill vary pharrue toue + Maanm evenyp.
Hulnz faturiday: Eq-acey mamon but in bin me grome doma the sonet prevelotoek rowe to to the wich brock rond wecame no in thei ante one oun late trip. Did not stap to callect diny.
fuly 3 Smubuy: very hot in sostrsale bay.
Tulyt. nent Inmu to Hemey Mill, dati hur Ducecer Buef amo nut severul ixcmbers o the Clabx Ar firn moterer ranime dorens. Vor Flyma thers maele acs Mm Divenfont. TMun Nartnear fflenisfied lit ivaseance 1 her-aveto. ve racuttorn Mnti- the Eorge but it dide motriekac unu lovq, Raver

120
labifolia frmany zears a-seo. me camve homue ne 4.4 Arain neetcer Pre, Brainnux nict.
fuly 5. This as the krogranu shaws? war a social hey, Heo s The ent did tu then iniegs mat Mip Rellew at he motken nosese D Rann dee ven burctafece pacour. greeu horssis. bat alsi in one inthe mondy flader IR mptom arde. anopustifolw Goar Clintaniain. Euevey fite opera kennz to hearAn brillor dasexibe みix zinu Pmut paintet Hlides Pfowen

Mus Matticupawe Min Batoe M男相tir cur table compamm ＊alss Mir elament a Redevur atty．Sene of llemmosit ans nero． קtis nepaew．
He is crinductur the care for the Itate us．Do Aelen of unhite Riven Tumetio for allewated aborfion． He arks abt the Sarnioh treece；川No．Carolina．

Verui kekink Portlant a Fillucglely

1221910
July 6 an early 7,30 ahart in one 4 horse o ove 2-hose apen teum- Bow hortis innagentater fur aopar filix-meas:
we onowe is the Blecing $k$ laen $\checkmark$ tork lothert raniti:Parmand Rpae $T$ apker a nule or mise Rout lepotrand soad $+x / 6$ a line broedx into oben brees s Rith Red. pho. Bndfewater selvore on ou dift rorad. Ine Rurud to the lept or do. Mneat + apace abx a mile cume to té DRatin on both sceles firce ored. rottr loove aferenter right $x$ a Ropicy bank on the zbeft han pide us Wh: Iclincluo fre Ronce fracler zex prog norici phecmens: иеco isklinty tuve for alc. Tre kepla= - Boun Bone quile इxech hill to Mex* Nonistoel villaqe T cacced du blan mowle uhe oforvires in her receadow this 硫 hovine plonts of AMmer acetrea a recent bim there, bint
mouius plentifully in the tenaciver
 at 11.20 Rew that the clut mipat Gueak uld $x$ aupant $b_{2}$ the 12．20． The rext ditue oay aeiv ares inmine ine－ataier ina dovio．
foly 8 Prn we trive oven jerkeriny route tietu ieix meas foteriu ＊$\forall$ grat a Carex noxpex ramid anni－Prat Fallica ly the ブァais
fuly P．Phe ve ostre in Bin about the village there akivoleale the strext，$a$－Rince Elm on Elin St is 15 tux－in eiranmaferu of $41 x$ of．the mormio．ine newt－ of awnther on twe ftherwou Ravin ont keyonr the eceis vhife fiemse： wie orome hereg tamis ithindita inile form the highury so vve life ith for a moce converunt lime．

1241910
Pily, 9. There have hen tax hays xork ever omee ve cam hec. 7 7 o ary atroom came7n. F以. Ennia Dinotugl Foreice prown in auso Hoil $85=$ mithe us mee etmiky Ther $85^{\circ}$ at velocte. our rormus shaby + cole There hot oceys.

Elra. Tur fargent Rele me is a ver lang Elu o the Efford Racd \& Ruxlans Bethil alt 10 zives Firu Rurlant: it has lakel emen phort by a fire lik by vome niscteverre bays.
foly 9. Pra 2n two carnixges all since shit the roseurawn zuthe billinis. atake apter vaitr the keavifine sot kowzes fur smapes, peovelues a pigs.

1910
Pulyio very trot findacy: the ophere antoed in mosura to coricis h aner in bon equept Bitio to Reden thale.

Fulyll swoniay: all in anto theo Bainas Evat Rerkel Eaot Rawdolkh East gxanitree mellerncotown ft the viel tionsu to linel bexurifil brook ace xer otecis zidis towtherg fhonk quef: had plain bevel at 57 cents lach. 7hen tiro Barme moukkeluer and maddlesex to Materbury good rosinc sitte batte at The Nakerfur Sun-, dore dy in RR ALatwor : 3'deer in off hersee erselosure.
Bhyr keandiful boglst cose dap: ael ì aufo to hiorratule zra flanv: frod raad. Eaitt's cottaqe" the Naver Brentani" Mr the plakequ over the そrus. /Lai lumeh there 5 sure pleasit w-ter suxiati-- Mwrrawiress. bacturellater. lav2 ley la ectock.

126
fuly 13 Mespursom: $\operatorname{mad}$ tे baeteHe ortars in anto to the He orders hu anto to the linueh whath nowe' hen frachomelitin boxt vanel Th he Needare al smenties Her noftif muxt on th tevexker for hureb an

Brott blace.
July 18 Fhis beim a cooles ben, "' thent two frow in ane at the net biile duyond The Merrill hovze ave, zeazan fr Pmens effers par coñ pactes fanct hove in haty bud ${ }^{3}$ ore tima ad, i four ゆlaws \& effuru' nar Ahos нин sem, t E Mought haek a few other? things.

$$
1860 \text { - July } 16-1910 .
$$

On July 16,1860 the members of this club presented themselves at No. 16 University Hall at 8 o'clock to apply for admission to the Class of 1864.

On July 16, 1910 the members of this club will present themselves at the Union Club at one o'clock to hold their 488th. meeting.

Absentees will please notify G.G.Grocker.

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20 pruly
C.E.7-canneout m the 9.35 - frain $\%$ ne mackef over slin Nicl oh the biede ot roxte Fath to cillsede G. Ithonis. hum the ace Perpsitertan - Covirus rucpsea n neas
 breolow awe datombe.. me huckit baelenu bielside ot ho car xtoonk 12.40 car in prder rotee fiersea at elruch rerbe Prilci--Enna karnowisti the lattios prove lame tanioxmor.
kernlock at Nilminyton
$22^{2}$ fuly. incelair frote ne in tios aniot necallit frive mometes oirbolku Seane $\%$ then to arlmoton, inhere af the foinle Dnia hiul nu met Mir forield took time aloreg-to Thow in a-verıplarge *emlocte. fure sonve sewen nouler anvay in iriknm tor the rowe on Whuch the bovell Elee car lime croskes the ffoustime river at the xamme peace as the red phidaleacy canal usco to cross hulk uh an Atsong stone funchatines jet stencedu $>$ spme tivent 4 tex above? ta river. Before getting to This canal oroseimy fon turne in on the lept fi actrich Foved arid after paimes half a rucle the tree is ore prin riqat loo beet. Reone alelnech Raad \& un a. 2leplet hollorw sa that is soge is zut axtall diverrued. put a af/raneluy it it on que a true borge in the frime of like, Cro hus Gomed Rarps thece ave a

130
Lav gaps fow brokorn iswach? mox 挽emx intanthe ran : The Hears avo: per hato Caxk moteis sotaple see exomme man have aust it. दhe xue pras banded - nith hancolirie agramot mosect ox aboux सput up: here the muker harth had echr eera/kit ô mate an even Rvertace. * put the otecl take aronice at aut 3 fux us, nat below The serakeo surface ausit measure of. 15 fect 2 incres: The shreat pliueds is the manui muearued lo 5 -ut rue entwneatiotwe heegho at 65 keet. 7he ruce hat had all ik life room to Fhread $x$ did rot Nave to ascered to get air light. we keptin the Elective haad to $1^{\text {it }}$ leftetcaeid rom berperie Cumal Budqex blot bu that ver nied niraor vand wht to the polate i ad leadinp to loinchester, not qon hark thro froku villare $\rightarrow$ hem to
Arlemrone Ntome. 67 niles Corltugtore Nome in by mide. Hills.
A crowd of about 150 people gathered in East Milton Tuesday night to watch B. Grover, a herpetologist from Hyde Park, extract the poison from the fangs of two reptiles recently captured in the Blue Hills. One was a young rattlesnake about two and onehalf feet long, and the other a large copperhead, three and one-half feet in longth. They were captured by James Leary of Granite avenue and have been on exhibition in the window of J. J. Hammers' drug store.

Mr. Grover grasped each snake by the neck and induced it to strike into soft rubber stretched over a vessel, in which the poison was caught. He then put the poison in a vial. He said the rattlesnake was a young one, but the copperhead was larger than usual. The poison of the copperhead, according to Mr . Grover, acts about five times as quick as that of the rattlesnake and a bite may cause death within six hours.

In case of a bite the remedy is to cut away the flesh from the point bitten about a half inch deep and one inch long. This should be followed by the use of permanganate of potash and chloride of lime as local washes. He said there are 22 species of snakes in New England, but the rattlesnake and copperhead are the only two that are poisonous. Mr. Grover said that he has collected nearly every variety of snake found in Eastern Massachusetts.

## "SOUTH" OR "SOUND."

To the Fidtor of The Nation:
SIR: Your correspondent's letters on South or Sound in "Twelfth Night" call to my mind Wordsworth's poem, "Michael," published in 1800, though, of course, Wordsworth may have had Pope's emendation of the First Folio directly under his hand. The words beginning at line forty-six are as follows:
And in his shepherd's calling he was prompt And watchful more than ordiuary men.
Ifence had he learned the meaning of all winds, Of blasts of every tone; and oftentimes, When others heeded not, he heard the South Make subterraneous music, tike the noise of bagpipers on distant Highland bills. The Shepherd, at such warning, of his flock Rethought him, and he to hímself would say "The winds are now devising worls for me"!

Geo. G. Kennedy.


1910 Neards pous Waylans.
Aug22. weth C, \& Frtal br the 11.40 Tram to LDaylant. W. Fometn at thaelthany. waeked to keardz Aond Af admures 7 meaves the ele in fonc of Mr dearg
 at it it ivon grecus is ace 19 bt 7 mele at 2 is from وrucuot: $1 \%$ \% 16 ano 19.7 , and 132 pt 6 melur théad. a- faury Cady bo the houre. bownd ur a sof ft neeanurin tape: the tree is oed failiip: tone of ithe braculle mere hied up by iron cleaicer - They hinpore to flough int the Whole areu bor the nuxt pear to nevirety the old hee Fhen ine- movit to the saccid. munctr laxyer thau nue haj
 remenulu be tead cver been there: 11.7 - has mecten it mith bremester. un hud luch in thade ftiees b the kared their maepio siskerly rex pt move thewe for wharev the Brivi a chirive facix

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Sren ller Rocox, allunku $P$ took, 3 fevual skecmuen: tero thpauthes boto taceies, Rohmreulus. repkenis Tatrltamea

- Elodea, veunto une. mehar to catela the 2,17 train kornee, to as pame no Reawt trwe. The bay war five

1910
24 anq with a ti $A$ white ash thee on Noadkicke in Caufow close the Hfruglitin hne on haoluzton of rear where the elcetive arros turuoff to goto fharon: ta Rree is close to tue miade sedewacke ? the 3 ft lime on the Redevacte is 4 frer more one tw Ridenewi the freld: at this line the ginth petve tree sure 16 quet 8 mehes.

31 Clng mat CEFMNT NADRE: at Hazlenvod station $T$ by the oed nosod pile paith mita the fom Brove Reservation: fust. opposte the ftring (now ong) oin the sioad aed dothe brovte tounis asplevin actosteckoides - yurther along by marted (ganhevy tru near where two pattes 1 crose each orhes BReqopkeris hexagonoktica \$ wo larye $12-15$ acers Baccel: Then we fifotanto Pundry Pond There the位cimin bemsyh. var nignum * sancuseacia euncos a in ounit, ilex laevigata. Fhim 3i/2 a vather Rteecto pravil fath tren rught hang side the Castamea pumilu( (L) hiel. this larkny quike naxtwe r tho. that rieard fit, hav nor befre Reu ici then back Rotaglerwon Stativn hey Ride bath with Abeankum pedatum actaca alba Fanucula marylanben.. - xupme carolnuamaifphit

1361910
8 Lept. whtere. 7 MN 7 for Ponkabog: rowet aeross ot Nentworlito Fothe Reservatum Path at the Fhove flining. Muent there for Xyris CPnachiana irh. C. E.7 remennteres they fot there Jeers ago. Dric nos pnod t. Htad enmeh i a chat came back to mentworth whue willum mit us $\rightarrow$. me rove hown for a 3.30 Tea it ther inent on the Hilo Electric.

Francoulia $n \mathbb{H}$
14 Lept Left boston 9.15 jeptervay with e. 7 . ars owletom 3.45. Tur fnnctit, jumior, met un with team rue arr née Cmitafayitte, Nouse at 5 aclock just aifne it beganto rain. we had a wet night, lent hat pood room nos prom rleat. Foday brighk akunui; am makked to Mur Lafayette noblei hover Fouso bisu ginte chipker. we had bickion Anme 7ringig Antean in ter foeld wise the ed of of etse vorats the war zucel mprestet ar he feat Rando the seeds Here in 190 t aed thargh the terd lootev for them ewny year rad never seen one. The reeds came Grom twaverhill Prast where Tha noble mred valive: As it is blambr an introrreio plant। and Char Fayou sair he hud nuwer Reen ith mouring $i$ Irnceoruia: foot alos Salix caxsammfer T Picea marcana with concer.

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pu. we eralkeryolsatersmiet the up the fued to the srifile Nourke Pvad o- fotite Fhrines i meatow aly a mile fever the roke. The say mas burfext cloudlext $x$ origlet: vecios of the rancye $r$ mrorilantere an Amall hice le road Yiside near the parkeneftim very beavtiful. Sutos and t-G horre dowiak pragize going ber ale the hime cut minat not preisent Rénula poppulifolia ly zoateries

15 lept Thwrovay. Am towars the, Profile isouse: the big baru deplimile fr sofel thnek ley Leghtim un tume 30 lasf $x^{\text {l }}$ entivel dextsoapes: the large hexer decoye some 30 were not in the bain but houses bigs or two cow 'fercoked en the Plamer: ich sfode Nex. the from brdje orver the Ecllo lake droolt. We took firnth now wusterly o at Welst broak beqan tolong $k$ the deasps, centbecedere, hornen.
mar the corner of short nowi not leadin tive the onts found a snace brovk i the raid 5 thorght in nng at be Nuals. but calec at $/ 2$ inquam. newir tam branch on the Eantue. Rovet fonno whe 7 Ress chictubu the he a 1897 Karvacivun * a futar for two jancy new now aththew. we deme lom by the Ram sanch Roat, ko going rumis the oquare. Biekt. some very peanlian Gray birch leave.
A.m. ne went up Bale River to the XRumizr acros the plant bidge Is la the shove to the gravell, beach Arluis tunce to the raad intathe aed sawnill home by the Framconin trater subtily: Ampelopkis vitacea med our the sluous m meatow. novels, but no truit: This is a bao ifcar for ale biuit, uw pum or cloke cherries' on eoniferous bouts: Sukas the lake prone tionti the eanre

Supx 16 Fivaq. Am ho fngan tice not orite to pectect $\nabla$ arme of the ved mill bridfe over Ham Branelr after a bime mact dinm that Nice in the thaty wode row. for aster tindryaun it the deo pleeo.
Pm. d thait axhometo ru men it d, st wewt nf totze
septin Laturiday: The fmest dan If all me have had here. Cleect a preat wimi and in fon thin olecey cloudr hiqh in a dup blue sky; these clouss weu in stramers sovimeters orw tchanging slowly. Me wacker to Berklehem $x$ dines at tha sivelair thouse wher Lla duppur iffuly 1864 with Eeonge Pictup. then we were on the stage from
the arrued at 11.40 Nothad qiuke a reststill I selock, ano diel not lenve tile 2-20to'conn bued The view of all the nots from the fich nios mip Crockeri hiner uroer the pirupt nue have Newn. \& lor on my bacte ore the warn Bn prounco pratekiy the oty in roheh great blue pakele. cumue Ar in the Eclepre sky at Brevyos.
Everur" Div" Smitt war here tena the Profile bocese: the is verydoak lent we kept up a toln au red doup rold acople, ak the Profile. He Hin von now run ren rafel.
$142 \quad 1910$
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PAK Aatu village t finelium Furnau kby wove batik timee into rime fine worle. Back vame nuas a \& loocgen pr canme at E Pm, a fram Rate

Sept 20. Iveodar: another fine dar. macked to sobli, farm $\rightarrow$ with him visited a brosk at eno of his mowine piece where he shewed us 'Caxsunsa to rame' alro Redum: tuen to a wets pond holet. stluagnum bog at the f.E fflis laus ano a Hew rods pronu lii oken fucd Thin logket lithe a cucloceghby bag: gathere bona peants operitrelum bor cace vivi $>$ here greur Rloodva i Chiognces. noble fous the sond ha: a firm levil botion ""they. have carted stiff frose the leathon fithe pons in very ony tiner: query wherter mase as the sorid lootes like the ett. mare hons. Whe came bactito dimer ispon waiked fothe apher eid \%. Nelage of kback. Thr Granskein went uls dafayetc: nूactivy ther macth * toins over to the bouth beak foo. light cloreds hid his vicus or alos preventit heho-eipnalliz to his wife hive: he reachiovtre thoted by 5 Pit2
$144 / 910$
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Sept 22 Thurabuy. Aim. on rasto Propile Farm mateho the moving Fthe senval house aeross stinetr brork to be retan estake whue the baru evas cournuees ay lightwin laxt Grone. then wenk thro gardul at profile tarm th down raad to crops roas at the deserted Larm near BAarris Sook + thence kome he the road. Pm tithe ob-Savmice on Gile River 7 astmired the 2 k ty corces r new

Sept 23 Irvour. Malkut to the old Man 1 the Pnto apprafele Lake: met Mr TMen Buage onvicy: hab oce lumeh at the lake + wacker. bouk be the path of sano Lake Who the woors to Profile Faun: dareckiedr in BM, but no rain. on the patte down he the borrof we meawnet a Pis fbrcec a fine tree: at 3 of Brom the provid Riv fat oud Elcurn mekenin cixzom

Sept 24. An walked to Forent bills. Hoflel K got sub of ampilopioi vitacea on the cabin: very few of the muld over have. Redded this pear, but that ume in a troleckete selceation had refte fruit for C.E.7. Then we wrekeo thro the uroodrto litte cork off thelter $x$ then thro Mnh crocters fometwou to the fued leyoried whece ure dat dom in the Remolvine $x$ gazce Th the range $A$ mit frori btire trombe for vur one recoct bamer

146
1910
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146
1910
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26 Sept warked to leckits orines thene at one aclocle: the day was an beantiful as one coned mogine: went by the charoval Berneri Road 7 past the Anuyle for life, a lange bowen pownin in topk of a boulden 7 ofreadn its rats oven the rock turface if the carth hemeath: the rook tud teaken on the Sernblanse a branceles or turnk. onover map, nhue eratefor taxomi grow ter mi teo. Treaturgnans former house to the rolel at pectith.
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27th Sepk Tuoobay: back to Boston and fuot as ixe left sinleton it beonan foram kertur like a rawn day north if the Ints. tho sue fommo sharanx weation ar ure formoyed towlinvait.

1481910
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FRIDAY AFTERNOON, OCTOBER 28, at 2.30 o'clock
SATURDAY EVENING, OCTOBER 29, at 8 o'clock

## PROGRAMME

Schubert . . Andante con mote, from the "Unfinished" Symphony
In Memoriam Julia Ward Howe

Brahms
Symphony No. 3, in F major, Op. 90
Allegro con brio.
II. Andante.
III. Poco allegretto.
IV. Allegro.

Beethoven
Concerto in D major for Violin, Op. 6I
I. Allegro ma non troppo.
II. Larghetto.
III. Rondo.

Strobe

Mr. W'llek's playing of Beethoven's concerto, was unique. For the first time within recollection a virtuoso made no attempt to make the music sound "bIg," as though it were of the heroic Beethoven of the $n \mathrm{f}^{\mathrm{t}} \mathrm{l} \mathrm{l}$ symphony, or even of the ninth. For the first time, again, within recollection a virtuoso made no attempt to make the cadenzas, the "passage work," the ornamentation of the Romance, the rushing rhythms of the Rondo sound brilliant. Mr. WVitek chose another way. He played the concerto without a hint of personal display, with a "platform manner" that was quietness and preoccupation in his task themselves. His tone was light, as the large and heavy tones to which violinists force their instruments go nowadays; but it was exquisitely soft, luminous, edgeless. It was all of the finer, sweeter, more insinuating qualities of the violin. Technically, in all the insistent demands, alike of the instrumont and the music; Mr. Witek's performante was flawless. Often it attained to perfections that were as the result of the minute care, the patient study, the endless polishing of years. The listener might almost hold his breath at the fellelty with which Mr. Witek phrased and accented the music, at the adroitness with which he "led" the melodies and accomplished the transitions, at the fashion in which he fused the voice of his violin with the orchestra or held it in contrast against it. The endless finesse of Mr. Witek's playing stirred mind and fancy, caressed and intoxlcated the ear. The unvarying beauty of his tone brought like sensations. The violin, the music, the orchestra all seema at one with it. The concerto resolved itself into patterns of sound adroitly and beaullfully woven, touched with its own emotons and so touching the hearer. We moderns try to read deep things into the concerto, which, after all, was written frankly for a virtuoso. Perhaps Mr. Witek is the nearer right.

Mr. ANTON WITEK
$150 \quad 1910$
Arnold Arbosenum Rlant.
nov1. Let ant the forl. bloents in vide the row wherere of sit lave patik zears plometo: a $X$ means 1909 that a living last yewr blant Whist is in the blace:
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152
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We, the undersigned, Democratic, Independent and Republican voters of Milton, earnestly beg your careful attention to the following facts concerning the candidates for Congress, to be voted for in our district on November 8.

The Democratic nominee, James M. Curley, has had long political service which has been unbroken by any evidence of care for the public welfare. Last January the Good Government Association said of him: "Absolutely discredited as a public servant, his continued election has been a menace and a disgrace to the city. An active leader of the Timilty-Curley combination of candidates for the Council, he, above all others, should be defeated."

Opposing Mr. Curley is J. Mitchel Galvin, a man of spotless npublic and private life. He served Boston efficiently for many years as City Clerk and two years ago came within four contested votes of being elected to Congress from this district, which had always been a stronghold of the Democracy.

The issue this year in our district is single and simple-between political decency and political indecency. To vote for Mr. Curley or not to vote at all is to refuse to aid civic cleanliness. Unless you wish to say for the next two years, "I helped to elect Curley to Congress," nothing should stand in the way on election day of your casting a vote for J. Mitchel Galvin.
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Robert J. Clark John P. Hall Wh. B. Thurber Phlif L. Saltonstall Charles E. Guild
Herbert B. Tucker
Charles S. Rackemann J. Frank Pope Parker B. Field Geo. G. Kennedy Ernest P. Libby Charles S. Pierce Charles H. Thayer
H. C. Gallagher Horace N. Plumamer Freeland D. Leslie John F. Brown Robert F. Herrick Nathaniel T. Kidder Edward C. Perkins Roger Wolcott Roderick Stebbins Arthur H. Tucker Edward M. Brewer Malcola Donald

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nouncement by the other railway nilar train showed the equipment ed by the companies:
ill consist of one stock car, one flat hree large baggage cars, and coaches he accommodation of the party in ye. The equipment covers in a very ough manner dairying, poultry, hortiure, forage crops, soils. The stock-car ${ }^{t}$ carry good and poor dairy cows for aonstration purposes, and first-class ar-type cows, and representative individ${ }_{\text {leep. }}^{\text {is }}$ of some of our leading breeds of reep.
To these demonstration trains a hearty reception has been given by the people in all sections of the two States, They are likely for some years to come to be regarded by the colleges as valuable opportunities for agricultural college extension, and by the railways as an effective means of the intensive development of the country they serve.
J. R. Wilison.

Portland, Ore, October 29.

## CALENDAR REFORM IN GERMANY.

To the Editor of The Nation:
Sir: We have all been confused by the appearance of Christmas on a different week-day each year, by the coming of ${ }^{\text {'Thanksiving on a different day of the }}$
month each year, by the variable recurrence of school terms; election dates, ete. If the German reformers agree among themselves and then bring the rest of the civilized world to their way of thinking, all these difficulties will vanish.

Delegate Pachnike, in the Prussian Abgeordnetenhaus, has already demanded that that body take action on such a reform, and the mathematicians are busy all over Germany with plans for effecting the desired regularity. Ernst von Hesse-Wartegg, in the Kölnische Volkszeitung, proposes to call New Year's Day zero (0), which will leave the counted days 364 in number and begin each year with the same day of the week. Most of the calculators do substantially the same thing, but dispose in various fashions of the additional uncounted day which appears with the leap years. Elsa Koopman, in Mronismus, suggests that the leap-days be allowed to accumulate for twenty-eight years, and then be disposed of in an uncounted "leap-week," She would set her calendar in motion with 1911, thus throwing her leap-years 1939, 1967, 1995, 2023, etc. She would omit the Sunday as Herr von Hesse-Wartegg proposes, would give January, April, July, and October thirtyone days each, the other months thirty; would set Sunđay, April 14, as Easter; Christmas for the fourth Tuesday of December, Thanksgiving for the 29 th of November, Her January, April, July, and October begin on Monday; February, May; August, and November on Thursday; March, June, September, and December on Saturday.
It is doubtful whether the standing still of the calendar for a week every twentyeighth year would not occasion more confusion than the present arrangement. A calendar which accomplishes all that she can claim for hers and would promise to operate with less difflculty, could be constructed as follows: Apportion the months as Fräulein Koopman proposes, then begin with a year that comes in on Sunday, as she does-1911, 1922, 1928, etc.-but leave an uncounted day between December and January, and in leap-years another between June and July, We may call the extra days New Year's Day and Leap Year's Day, and thus locate them adequately without numbers, The first month of each quarter begins with Sunday, the second with Wednesday, and the third with Friday.

A division substantially like this has met with general favor and is possibly the calendar of the future.

Roy Thmple House.
Magdeburg, Germany, October 22.

## FUNERAL OF ALMON D. HODGES

## Service Held at St. James's Episcopal

 Church in RoxburyFuneral services for Almon Danforth Hodges, who died on Monday, in his sixtyeighth year, took place this afternoon at St. James's Episcopal Church, St. James street, Roxbury, and were conducted by the rector of the parish, Rev. Murray W. Dewnrt. The usual ritual was followed and the choir of the church sang several selectons. Afterward, the body was taken to the crematory at Forest Fills.

Almon Danforth Hodges was born in Providence, R. I., on July 16, 1843, the son of Almon D. Hodges and Martha Comstock (Rodgers) Hodges. He fitted for college at the Roxbury Latin School and entered Hasvara in 1se0, receiving his A. B. degree in ' 64 and that of $\mathrm{A}, \mathrm{M}$. In ' 67 .
On Jury 16, 1861, he was elected and commissions 1 a lieutenant in the Forty-Second Massachusetts Volunteers, having previousIn served as private in the Forty-Fourth Massachusetts. He was honorably discharged at the expiration of his term of service Nov, 11, 1864. On his return home he entered the engineering department of the Lawrence Sclentific School, where at the yearly examination he secured the first place in his class.

In August, 1835, he sailed for Europe fo $_{6}$ and entered the Royal Saxon Mining Aced: amy at Freliberg, Saxony, where he remaine until July, 186\%, pursuing the study of mining engineering. After finfIshing the course at Freiberg he made a mining and metallurgical tour through Middle Europe, and returned to the United States in October, 1868. He remained in Boston until June, 1890, and then travelled through the chile? mining districts of ColoFado, Utah and Nevada, reaching S San Francisca: in 1863.
He did important work as a consulting mining engineer in examining and opening up. mines. On July 10, 1882, he married Bertha Louisa Bernard and after her death, on May 14, 1884, he retired to a large extent from the practise of his profession.


The urgency of some of his friends and former clients led him, however, while refusing general practice, to make two professional visits to Peru, each lasting about fessivar. Mr Hodges published works one year. besides one or two translations consisting, besides one or thous minof small German textbooks, of various mining reports and numerous articles on mining and metallurgy.

For many years past Mr. Hodges has spent most of his time in Boston. He leaves an only son, Frederick Hodges, now living nl California. Mr. Hodges belonged to the Union Club, the New England Historic Genealogical Society, Rozbury City Guard Veteran Association, Veteran Assoclation of the Forty-fourth Massachusetts Regiment, Harvard Club of San Francisco, also, the Union and the Olympic and Loring clubs of that city; Department of Callformia, G. A. R.; the Loyal Legion and many scientific societies in tins country and Europe.

Henry Johnson's Poems
The Seer and Other Poems. By Henry Johnsin... Brunswick: F. W. Chandler \& Son.

$!$HE title poem, the Seer, was read at the local celebration of the Longfellow centenary, Bowdoin College, F'eb. 27, 1907.". It is a production notable In its way, -in that it suggests dimly and mystically far more than one would venture to read into the lines. They are to be pondered as oracles of old, that were delivered fariall time and for every were delivered vague expression, goes to age. is hounds the reach of directly bounds beyond, the reach its quality we winged words,
If Thou have joined in us the hearing ear, If Thou have fin, the life that dwells apart, Thy universe beats with the beating he The music of the atom and trending woes, We, too, may hear the never-ending woes, May suffer with the hopenly harmonies, To thunders of the heavenly greatest poet rose.
For through ant er poems are, many of them,
The shorter poems are, many of them, in the form of the sonnet. a good degree aged with ease and with a good degree of satisfaction to the reader. The poet has had much practice in this kind of verse, for he has previously given to the world an accurate, spirited version of the sonnets of Jose Heredia. External the sonnet human nature are so closely blended in the poet's thought that he leaves the full development to the end, and perhaps the reader pauses far a time to contemplate the picture presented in the lines. FlIer is an example of the author's happy art and practised'skill: I wander homeward with slow steps along The country road you knew years, years ago I hear the thrush you knew call
For answer to his hade even-ill are strong
The oaks upon the hillsides in defiance throw
As those mighty arms straight out, scorning to the row
With earth-bent 1 imbs , as it to stoop were wrong.
O. sturdy kindred of the early time. beneath Whose rugged
In selforeliance of unseeing trust,
In self-reliance or the heavenly fields subWhere,
lime,
$\mathrm{lime}_{\text {Accept }}$ the loving thoughts of ours that rise From these dear scenes where sleeps your earthly dust.
The reader of the sonnet, as he goes through the octave, may well ask, to whom are these lines addressed? But his query is answered as soon as he comes to the sextet, and he immediately discovers for what purpose and with how great propriety are the oaks intraduced into the picture. The composition, as a whole, is admirable. It is along this line that Professor Johnson succeeds best in his work.

154

ant when Bur valiant for Truck went over the River all the trumpets somas for him on the otter side.


## SIGNOR BERTOLOTTO'S ORIGINAL EXHIBTiTON OE THE



Whose extraordinary performance has received the distinguished patronage of the EUROPEAN SOVEREIGNS. Now open at

## No. 503 WASETNGTON STMRERI,

Exhibited by SIGNOR BERTOLOTTO, the Inventor
These surprising little creatures consist of a Troupe of $\mathbf{1 0 0}$, who, after the most unwearied perseverance, havo been taught to go through a variety of feats truly wonderful, of which the following is the

## PEOGFRAMMMH :

THE BALL ROOM, in which two ladies and gentiemen dance a pollea. The orchestra is composed of 15 musicians, playlng on different instruments of proportionate size. Four havitg o game of whist. A little brunette cn a sofa is flirting with a fashionsble beau, while her mama's mind is ongaged in the politios of a newspapor. The saloon is lighted by three elegant chandoliors. The performers in ohis, as well as in all the following pieces, are ons, dressed, harnessed and instructed according to their respective tasks,
also Fleas, well drossed, with parasols, sto by two Fleas; the occupauts and coachman are Nob, wha dressed, wha parasols, 80
ANOTHEN ASGRY-GO-ROUNDS, $A$ Dutoh windmill, are aach sot in motion by a Flea, frock, shawl and collar. draws a bucket of water frow full of flowers. Another dressed in of Honor, sword in hand; tho arms are of wheel, with a well. Two Fleas decide an Afrair

DON QUIXOTE AND SANOHO PATVA
THE AMERICAN STEAMER, carried by a Flea
THE WIID PITA
between wild and civilized. İea,

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MADEMOISELLE IS NORMAND, or the Sybil, will tell the visitor's fortune, a most Weird-100king old Flea. And a variety of other arlistes too long to enumorate. The beauty of evers beholder.

THE PRINCE OF WALES IN UNDIA, on his highly onparisoned
phant, drawD by is Flea, six hundrea times its own weight. Flephant, drawd by a Flea, six hundred times its own welght.
Open from 10 A. M. to 9 P. M. Admission 25 Cents
"Fanny Gray" may be interested to know that it was written by Mrs, Russell Kavanaugh. $7 / \mathrm{Fl} 4 / / / / \mathrm{M} . \mathrm{L} . \mathrm{B}$.
8916. While I cannot give the author of these lines, I. send the entire stanza; it may make it easier to locate the poem:
As life runs on, the road grows strange
With faces new, and near the ond
The milestones into headstones change
'Neath every one a frlend.

$$
\mathrm{M} . \mathrm{L} . \mathrm{B} .
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THE PRINCE OF WALES IN INDIA, on his highly caparisoned Mephant, drawn by a Flea, six hundred times its own weight,
Open from 10 A. 1 M. to 9 P. H. Admission 25 Cents

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LESSEE AND MANAGER HENRY C. JARAETT,

LAST WEFK BUT OṄE

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GROVER'S
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DIRECTOF
LEONARD GROVER
EON GR OVER W......................... Aso o Grofi thentre, Phlade phite
CARL ANSCHUTZ. $\qquad$ CONDUCTOF
 Govenod'l grand Opera, in 5 acts,

## HAUSTM!

Faust. ........................ Franz Himmer Mephistopheles.....M. Joseph Hermanns Marguerite............ M'lle Marie Frederici Siebe Mad. Bertha Johannsen
Valentin .M. Heinrich Steinecke
Wagner........................... Anton Graff
Marta...........Mad. Margaret Zimmerman in the fourth fot,
GRAND.EANAREMILITAIRE With the Entire Grand chorus and orohestra, and a FULL MILITARY BAND.

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## Bogtom dheatre.

LESSEE AND MANAGER HENRY C. JARRETT.

# SECOND WEEK 

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GROVER'S

# Theman © 9 prat 

LEONARD GROVER DIRECTOR Also of Grover's Thent $\qquad$ CARL ANSCHUTZ Theatre, Philadelphia. . CONDUCTOR

## 

Grand Opera, in 3 acts, by Beethoven.


Leonore, under the name of Fidelio,
Mad. Johannsen
Roceo. M. Joseph Hermanns

Florestan
$\qquad$ .... M. Franz Himmer Don Pizarro........M. Heinriche_Steinecke Narcelline............. M'lle Pauline Canissa Jacquino...........M. Theodore Habelmann Don Fernando
$\qquad$ M. Anton Graff Prisoners, Soldiers, Peasants.

[^2]1911
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Concord


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NEW LIBRARY BUILDING FOR harvard botanical gardens

Gift of $\$ 25,000$ From Anonymous Source Makes Possible New Structure for the Gray Herbarium.
Cambridge, May 3.-A $\$ 95,000$ gift from anonymous sources has made possible the construction of a new Horary for the Gray Herbarium of the Harvard botanical gardens. Work on the new structure is to begin at once.
The nad wing of the building, in which the library is now contained, is to be removed and the new structure is to be built on Hines similar to those used in the construction of the Kidder wing, on which work has been progressing for the past two years. Fireproof material only is to be used in order that the 20,000 books and pamphlets that are said to make up the most valuable botanical literature collecHon in the country may be adequately protected. It is the plan to replace ultmately all the old buildings that compose the group.

The Gray Herbarium, Harvard University, is to have new quarters for its library. The structure will be a two-story addition to the present building and will extend to the west, taking the place of the old library wing, and covering part of the site recently occupied by the Asa Gray House, which was removed some weeks ago. The addition will be of similar construction to the Kidder wing. The library, which will be placed in the new building, is devoted to the classification of flowering plants and ferns. It contains more than 20,000 volumes and pamphlets. The gift which makes possible the erection of the new building amounts to $\$ 25,000$; it comes from an anonymous friend of the university.

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16 Man with Halt CE 7 inseaford, but Wrotabl had mot recil ${ }^{\text {M }}$ 领 7 Wrotailh had mix recil C EF: Atthe concore chen on thene bo the croos path ine tonk on april "' co do avis raid - Thenue be the opler concore Roa back to the vellage. Whech is so comrura early at vielonghly, ffus it in the Ymaderex Flow one fon Dunstable, broughk balk also a blue $a$ a naike inolit
a fine elm on the BNewaek the vincag crosut man S.U. of at 3 ft po the ground fouttem fut tru incles. Time say but everylains very ory.

## RECENT DEATHS

> WORLD EXPERT IN BOTANY
> Profennor Cyran Guenney Pringle Was Curator of Herharium at the University of Vermont
> Professor Cyrus Guernsey Pringle, curator of the herbarlum at the University of Vermont and one of the best-known botanists in the United States, died yosterday at Burlington, Vt. He was seventy-three years old. On his last search for spring blossoins he caught a severe cold, which developed into pneumonia and the end came at the Mary Fletcher Hospital. Fils herbarium at the Unlversity of Vermont was sald to be one of the lariuUt
> in America.

Professor Pr world's most if ical research. ended with his b the might assist prerents, he suce in reaching gre ficld.

Born in Char Mr. Pringle fr possessed a pasi ers. The death hls taking a botany in the but he devoted He became an New England young man he Asa Gray of He up certain plar tains and the 8 ter, as collectc seum of Natura he made collec State of Wasl made, and styl tors" by Profes Harvard tenive gate the flora
Ing year he w tor. Jear afte and brought o to 30,000 specir Mr. Pringle's enrich the her sets have been tanical museur. American uni riched by seti with the "Prin
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206 gained by a reform of the calendar.

## reformed calendar

A calendar project which ignores the immutable character of the week has slight chances of being adopted because the week is fixed by religious observance in all christian nations. The calendar here proposed is based on the week as a fundamental unit. It is closely similar to the calendar recently proposed by Dr. O. G. Hopkins, but differs in that it consists of a year of thirteen months, each four weeks in length, instead of Dr. Hopkins's twelve months divided into quarters of three months, each quarter containing two four-week months and one five-week month. Dr. Hopkins's reason for retaining twelve months is that the quarters of the year may be even months, but the value of the quarter year as a unit of time is incomparably less than the value of the month. It is highly desirable to have all the months the same length for the reason that salaries, wages, rent, board and many other ordinary affairs are counted in months. The advantage to be gained by having months of uniform length is one of the most marked advantages to be

In the present project the new month is inserted between June and July. This is the month in which the summer solstice occurs in the northern hemisphere and the winter solstice in the southern hemisphere, hence it may properly be called "Sol"-the month of the solstice.
In the new calendar the guarters are easily found, as each consists of thirteen weeks. The four quarters would end on the following dates: first quarter, $\Lambda$ pril 7; second quarter, Sol 14; third' quarter, September 21; fourth quarter, December 28; and these dates would all be Sunday in the new calendar. The present project therefore contains all the advantages of Dr. Hopkins's project, and the additional advantage of having all the months the same leugth, as well as multiples of the week.

Other advantages of the new calendar are: the year always begins on Monday; every month begins on Monday; the same day of the year always occurs on the same day of

One of the most interesting of scientific ? lectures was delivered at the Polyclinique. 3 No. 4360, May 20, 1911

Henri de Rothschild at the end of March by Prof. S. Pozzi, and has just been printed at length in the Revue Scientifique. It described a visit lately paid by the lecturer to the Instituto Serumtherapico of Butantan, near to Sao Paulo in Brazil, where the cure of snake-bites by a serum taken from horses and asses made immune by injections of snake poison is practised. One of the unexpected offects noticed was that the horse towards the end of the treatment became much heavier in weight, but lost this increase when the daily dose of attenuated
SCIENCE
L.N. S. Vol. XXXIII. No. 857
the week; the same is true of the days of the month. Thus, the first, eighth, fifteenth and twenty-second of every month would fall on Monday; the seventh, fourteenth, twenty-first and twenty-eighth of every month would fall on Sunday.

If desired Sunday may as well be taken as the initial day of the week, month and year.

An additional advantage is that a calendar for one year is good for all future time, as the years are all alike in all respects except that every fifth year has an extra week added to December, with exceptions noted below.

The details of the project are as follows:
Common years consist of thirteen months of four weeks each, namely, January, February, March, April, May, June, Sol (the month of the solstice), July, August, September, October, November and December;
Long years differ from common years in having an extra week added to December;

Years divisible by five are long years, with the exceptions noted below:
The extra week is omitted from years divisible by 50 . It is also omitted in the year ' 25 following centennial years divisible by 400 , and in the year ' 55 following centennial years divisible by 25,000 . This makes a calendar good for more than 300,000 years.
In order to cause less confusion, this calendar should be adopted in a year that begins on Monday. In the near future these years are 1912, 1917 and 1923.
In order to secure the adoption of a reformed calendar, we must secure the appointment of an international commission with representatives from all civilized nations. It seems to me that our present duty is to begin a serious attempt to secure the appointment of such a commission. Oan we not form an organization for this purpose?

Wasungaton, D. C.

## quotations

the nclence museum and the natural HLSTORY MUSEUM
During the past few weeks we have printed letters from several distinguished correspon-

## RECENT DEATHS

## WORLD EXPERT IN BOTANY

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Professor Cyrus Guernsey Pringle, curater of the herbarium at the University of Vermont and one of tho best-known botanists in the United States, died yesterday at Burlington, Vt. Ho was soventy-three years old. On his last search for spring blossoms he caught a severe cold, which developed into phewmona and the end came at the Mary Fletcher Hospital. His herbarium at the University of Vermont was said to be ode of the largest and most complete in America.

Professor Pringle was one of the world's most famous figures in botantIcal research. A man whose "schooling" ended with his boyhood days in order that he might assist in tilling the farm of his parents, he succeeded by assiduous study is reaching great heights in his chosen field.

Born in Charlotte, Vt., May B; 1838, Mr. Pringle from his earliest boyhood possessed a passion for plants and flowers. The death of his brother prevented his taking a contemplated course in botany in the University of Vermont, but he devoted his spare time, to study. He became an authority on the flora of New England and Canada, and while a young man ho was commissioned by Dr. Asa Gray of IMarvard University to 100 K up certain plants in the White Mourntains and the St. Lawrence Valley. Later, as collector of the American Muserum of Natural History of New Fork, he made collections from Arizona to the State of. Washington. His reputation made, and styled "the prince of collectors ${ }^{* 2}$ by Professor Gray, he was. sent by Harvard University In 1884 to investigate the flora of Mexico. The follow ing year he was made botanical collecing year. Year after year he made the trip and brought out each time from $10,000$. to 80,000 specimens.

Mr, Pringle's Mexican plants not only enrich the herbaria of Harvard Univer sty and the University of Vermont, but sets have been sent to the principal botopical museums of the world. In turn, American universities have been en riched, by sets from countries favored with the "Pringle.herbarlum." 26 whtatio


## REFORMED CALENDAR

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# تI巴工D DAY <br> ITEW ENGIAND BOTANICAL CLUB <br>  

At the invitation of Prof. J. F. Collins there will be a Field Day in Finode Island on May 30th, 1911. Members will take the Colonial Express at 8:00 A. M. (Back Bay, 8:04 A. M.) reaching Providence at 8:59.

The plan is to divide the party into squads of two, each squad to have a definite region to explore. Members will take Junches and spend the day ofield. At six o'clock the party will Gather at Hotel Newman, 28 Aborn Street, Providence, for dinner (\$1.00 per plate). There will be an opportunity for comparing notes brief $\overline{\text { n }}$ y before taking the 7:30 P. M. express for Boston.

Great interest was shown in this invitation at the May meeting of tre Club, and sixteen rembers at once volunteered to BO on the excursion. Will they and all others who can go please notify the Chairman of the Committee before Way 2and, so that detailed plans may be arranged? If ony cannot decide till the last minute, plesso saj so, and provision will be made for such late comers.

The primary oibject of this Field Day is to build up the Cluk Ferbarinm, in which Finode Island plents are very poorly represented. It is extremely desirable to assemble a large party in order to cover ws much territory as possible, and the committee is sues this call for volunteers, who will be willing to devote one day to collecting for the Club Ferbarium. An opportunity is thus offered to all, materially to assist the Club.

The work is not difficult. All that is necessary is to ccllect a few specimens of everything, Ancluding particularly the comonest plents, and to press them, recording notes of habitat and environment. It is not necessary even to determine the plants collected. It is only required to collect and press them.

Iabels will be furnished later, and the pressed plants can be turned over th the curators of the Phenogamic and Cryptogamic Herbaria.

| C. H. Knowlton, 120 Boylston St., Boston. | Committee |
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|  |  |
|  | on |
| M. I. Fernald. |  |
| T. G. Floyd. |  |

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## POLLUTION AND THE NEPONSET

To the Editor of the Transcript:
It is proposed that $\$ 150,000$ of public money be now spent to deepen and straichten the channel of the Neponset River above Hyde Park. Taxpayers will have to pay the money. Before this $\$ 150,000$ is raised and spent (and as I belleve, wasted), I desire to go on record in the matter. Having lived close to this river (near Paul's Bridge) for twenty-five years, and having crossed the stream a good deal more than 15,000 times, I know something of it.
15,000 times, In saying, as I now do, that I belleve the proposed expenditure would be a mistaken and unwarrantable use of money, I wish, at the same time, to say that I think the condition of the river is a disgrace to a the condrion orespecting community, and also that I have only praise and gratitude for the spirit which has for some years been shown by Representative Wolcott and others in their desire and efforts to abate this long-standIns nuisance. It is the present plan which I think wrong.

There is no mystery about the Neponset River, nor is there anything connected with it (as God made it) which is different from hundreds of other 'streams in the Commonwealth. Thero is nothing in the situation which now calls for or justifies an expenditure of $\$ 150,000$ (or any part of it) in order to deepen and straighten the channel of this stream above Hyde Park.
Let us look at a few simple lacts. From Canton to Hyde Park this river runs in a winding bed, through flat, marshy meadows which are naturally like thousands and thousands of acres of other marshy meadows in the State.

The watershed is extensive and every pring an enormous flow of water is suddenly run into this bottom.

From Hyde Park to the sea level the channel of the river is narrow with high lands on each side-and several dams use 1 for power purposes. In this part of the river the present natural channel is wholly inadequate to carry off the spring flood. Any intelligent denson can figure out and demonstrate this fact. I have annually, for the past twenty-five years, seen these meadows above Hyde Park flooded, over their entire area, from two to six feet in depth. It is a regular annual occurrence. It has gone on in substantially the same way (and for the same reason) ever since the river was formed. It is precisely similar to the annual flooding of thousands of other acres in the State, and it will continue untll the channel of the river from Hyde Park to sea level is very much enlarged, probably at least doubled, in capacity, and one or more dams removed. This enlargement and removal of dams I do not understand is now proposed at all, excent for taking some flash-boards off the top of the upper dam and taking the top off' a ledge in the river bed shortly below Paul's Bridge. It would obviously be a very expensive matter.
Until this is done, however, it is absolutely certaln that the meadows will continue to be flooded each year, and, as long as the water is full of sewage and filth such wastes will be annually spread, by the overflow, over the entire meadow area.
It, is now (and under such conditions) proposed to spend $\$ 150,000$ to deepen and stralghten the channel of the river through the meadows above Hyde Park, and it is sald that if this is not enough, at least it will make "a good beginning.".

Let us aste ourselves a few questions:

1. As lons as the river is practically a big open sewer does it make $\$ 150,000$ worth of aifference to anybody whether it is stralght or winding?
2. If the water were clean would not everybody agree that its meandering was pretty and harmless?
3. If the river is to annually overfow its banks does it make any difference whether those banks are stralght lines or curves?
4. The meadows being nearly all owned by the State, and the scheme not being a meadow reclamation scheme, is it going to beneff any land at all? (It certainly won't beneflit mine.)
5. If the scheme were one to drain and reclalm these meadows, why should the towns in the area be called upon to pay for reclaiming state lands?
6. Is the State golng to establish a precedent, following which it will appropilate hundreds of thousands of more dollars to deepen and straighten all the other winding streams in the State which run through marshy meadows?

Now, as I have said, this river, except for its pollution, is Just like hundreds of other streams in the state. It has been deliberately and openly and shamelully polluted until it has become an offensive disgrace. It is still so polluted day after day. This pollution (which is perfectly obvious to sight and smell) is by indivlduals, firms, corporations and even by towns, and is clearly unlawful. It is the plain duty (and within the clear power) of the State "board of health and the Attorney General to stop it. If the river were not polluted everybody would enjoy anc admire it and nobody would think of spending a dollar on it.

The proposed expenditure of $\$ 150,000$ will not lessen the pollution at all but will add $\$ 75,000$ to the State debt and w111 impose an additional $\$ 75,000$ tax burden on the residents in the Valley. All (as I say), without gain or advantage, except to engineers and contractors.

It is in line with the tendency of the times. Something is the matter! What shall we do about it? Oh, go to some Stato Board or Commission and get an elaborate report from thelr engineer and then do nothing until the Legislature fives you a big appropriation!

Why not stop the unlawful pollution, without any expense to anyrbody (except the lawbreakers) and then see whether anybody thinks that the expenditure of $\$ 150,000$ (or any part of it) is called for? It can be spent then fust as well as now if it then seems wise. Why not take the absolutely necessary step first? I am aware that the engineer is of opinion that there is so much filti in the river bed that even if the water from now on were clean it would not scour out the filth. Is it better judgment to bet $\$ 150,000$ against nothing that this engineer is right, or try clean water for a year or two and see?
June 12. $y$ Fblix Rackmanan

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22 fume with C. 7 . Nat FEer Begs to the oed barn in dymnfued that in 2855 - 62 belongeato $m$ tatter $>$ where dunt Harriet her family lived we went torowill ot station.



 and全 river were clean, but the Mystic River
is a tidal one, and has not been dammed
till a year ago, as it could clean itself.
Now the Neponset, as Mr. Rackemann Now the Neponset, as Mr. Rackemann
admits, has dams and has had them
for years) below Hyde Park, and as
they have not been removed, even in the flood times of the year, even in
matter could not be carried down to
the sea, (as in the case of the Mystic)
 thing more than building a sewer must
be done to the Neponset, unless all
the dams are taken down and not allowed to be put back,
The Mystic is as winding not al-
posset, though much shorter. Monday, June 19, Misti. Fanny Brooks.
Mon er niedungs were ale there, and die bed buck tin intorthe cellars: the wei charge elm in font fore The invite aplite in is prime. The indene rit the Ran n ontelie same acer sqoture.

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Symmfild.
22 fume with C, 27 Nal Hev Bunges to the oed baru in lymnfued that in 8855 - 62 belorged $t$ mitatuer $\%$ where Annt Aaruet, Ther fomily lived Tre went to lowice ot otation * waeked ${ }^{\prime}$ the tighwar baxk Mowtrose Stative tresolto fired the oed gnot mill, of learnes in had long been absent; The ted road lad beer discontincet cho twithe house io a strayliter hyluway abot louft eapt or $\sqrt{c}$. of the oek ane: The norcke barn evere in the saume or hovise degree of shalobinest, but the only ghve me a more vivid pecture of the Blace a of hucu it, as die orginal buiedengs weve ale there, ank the eed buekticus $m$ to the cellar: tie rery harge elun in fornt. Tie hozise iskeavis in is prime. The inacte rik the Caire vmiter tur 2 brungaters mto-the vame der-pasture.

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When bith xame meadow sdge (What kime ekating he had) Th the lotining tore ly tere' Darn; Shai fool naw paone as erier bent the earen has rear of monendec o suptose to pload or clew the neaders above; a conardcradee new ćamal woth pater at the dam enrduntle led fl the wropber mate s the meaborss: we kiptern bey the pastures, has orrelimach madere on oakapter one or livo allempts cnazan inp thox the Coraque truet meainw deparativs m rovn the om hell las Mralunt fx: on this madsude we forcico Ceramus, turmes aendeto look' at Pillings Rozed Then nvalked vo lismntuee Cewtre RR RAation $*$ urne in Bostor at 3.55 .
$* * *$
(845.) When, where and by whom were The "Educated Fleas" exhibited in Boston? What was the nature of their performance? Would like all detalled information obtalnable. Some of my friends have accused me of a too vivid imagination when I claimed that a "fiea could be educated."
J. B. G.
[Nearly a generation ago the educated fleas were exhibited on Washington street, somewhere near West street. They were in charge of an old man who trained them himself and fed them on his arm, which looked bloodless and had the aopeararice of having been nipped all over. The admission was a quarter of a dollar, and not the lension interesting part of the exhlbltion was the nccounts, true or lalse, which the exhibitor gave of his travels. One story was that when exhibiting his little pets wefore one of the royal families of Furope a flea es of the royal families of Furope a flea escaped and could not be found, upon whleh he requested a princess who was present to see if it was not upon her person. The lady complied, with his request, but the flea which she produced was not his flea, which was afterwards discovered. The exhibition of these fleas showed what infinite patience can. do in training any living thing.

One flea took the part of Rebecca at the well and drew up a 11 ttle bucket from a miniature well; a pair of fleas drow a tiny coach, in which was seated a "lady" flea with a parasol, while coachman and a footman completed the outfit. The dresses were glued to the backs of the fleas, which were so slippery that tho minute garments would not have remained on otherwise.]

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## Death of Harriet White.

Harriet White, wife of the late Benj, C. Ifarris, and the last of the family of John and Nancy White, of Weymouth, died in Boston, Aug. 17th. Mrs. Harris retained the traces of youthiful beauty to her 83d year. She was a woman of fine natural abilities and marked energy of character, and will be greatly missed by her circle of relatives and friends. An elder sister of Mrs. Harris' of great excellence of character, and personal attractions, was Susan White, wife of Christopher Webb, also of Weymouth, who through the years of his active life was devoted to the interests of his native town and county.

## 23 tume 1911 RECENT GIFTS TO THE GRAY HERBARIUM

Mr. George Robert White, of Boston, has subscribed the sum necessary to rebuild and considerably enlarge the laboratorics connected with the Crray Herbarium. The new structure will be a two-storied thoroughly fireproof wing, sixty feet long and thirty broad, extending from the central portion of the building toward the conservatories. The lower story will contain two laboratories for work in systematic and geographic botany, while a portion of the upper will be equipped for the herbarium of the New England Botanical Club. Mr. White's gift includes $\$ 21,500$ for construction and $\$ 10,000$ for equipment. To secure the highest degree of safety for the collections, the cases and so far as possible the other furnishings will be of steel.
Through an anonymous gift of $\$ 25,000$, announced some weeks ago, the Herbarium will also be provided with a library wing, to extend from the main building toward Garden Street and to cover a portion of the site formerly occupied by the Gray residence, recently removed. Plans for these two extensions, prepared by Mr. W. L. Mowll, have been approved by the Corporation and construction will begin as soon as practicable.

Mr. Casimir de Candolle, of Geneva, has given to the Gray IIerbarium a cast of a bust of his father, the distinguished Alphonse de Candolle, in remembrance of the constant friendship between his father and Asa Gray. The bust is by the well known sculptor, Hugues Bovy.

## BOTANICAL EXPEDITION TO NEWFOUNDLAND

An expedition in the interest of the Gray Herbarium, under the direction of Professor Fernald, leaves Boston, June 30th. Professor Fernald will be accompanied by Professor Karl M. Wiegand of Wellesley College and Messrs. Edwin B. Bartram and Bayard Long of the Academy of Sciences of Philadelphia, with Mr. IIenry T. Darlington, 2 G.S., as general assistant. Headquarters will be at Crand Falls on the Exploits River, and the explorations will be chicfly on the northeast coast of the island, thus supplementing the former explorations of Professors Fernald and Wiegand on the northwest coast.

## Communications.

DOES NOT LIKE PRESCRIPTION.
Felix Rackemanr Answers Representative Wolcott's Letter on Neponset River Purification

To the Editor of The Milton Record:
There has leen forwarded to me in the West a copy of Mr. Roger Wolcott's reply to my letter of June 12 , in the matter of the proposed expenditure of \$150,000. on the Neponset River.

Mr. Woleott and I both want a clean river. We differ only as to method.

He ceems satis ed to accept, in blind faith, a recommendation of the Board of Health, (or its Engineer) and suggests that we should either swallow their medicines or "abolish" them as doctors.
I, for one, am not satisfied with their prescription, (if it be theirs) but I do not see why I am therefore called upon to attend to their "abolishment

Mr. Wolcott says the Board of Health made an "exhaustive investigation and report in 1897" and that their riews have remained "unchanged" since then.

According to Mr. Wolcott the Board of Health has therefore known for the past 14 years of the disgraceful conditions. If one considers the somewhat extraordinary statutory powers of the Board in such matters, the question naturally arises, Why the delay of lif years in having a health muisance ahated?

My confidence in a pill given me by a physician who has seen me sutfer for 14 years without relieving me is not a.s great as Mr. Wolcott's would apparently be.

Mr. Wolcott says in one paragraph: "the whole river bed is at present encrusted with accumulated pollution which must be removed before it will |again be clean;" and that it is now proposed "merely to cut off some sharp bends which interfere seriously with ite flotr."
I could hardly believe my eyes when I read the foregoing, but there it is! If it is now proposed to spend $\$ 150,000$, "to cut off some sharp bends" in this river, and if the whole river bed, for miles and miles, must be cleared of its "incrustations," how much is this clearing foing to cost? Why not get the whole "Wig pill" now and take a look at it, Mather than begin with a little out (8150 000) with the directions to "Keep taking till death ensues?"
ir Wolcott cites the similar work
Mr. Wolcott cites the simular work dene on the Sudbury River-and for the benefit of Concord. I have good scientific authority for the statement that the work on the Sudbury was "withou any beneficial result," and with "no im. provement of the land of the sudoury meadows" and further that since the
work was done Concord has had "an work'was done Conc
There may be malaria in the Neponset Valley, but, in 25 years continuous residence there, I have never heard of more than one case, and that was not through any physician. We don't want any "epidemic.
Ir. Wolcott says the plan is to "prevent the overflow in the late spring and summer." There have been no such summers between May lst and Noremher 1st during the past 25 years, to my jer ist knowledge. The meadows flood pertty regularly in December or January pretty reghod continues until the ice and the It runs off the breaks up. It then runs ofl.
simmer there
Nothing, which Mr. Wolcott says is Nothing, which Mr.
now proposed, will stop this annual overnow
flow.
flow. Vr. Voleott says that "the active polMr. Woleott says that "the active pol-
Iution of the River is being rapidly abollution of the River is being rapidiy aboithed." I never remember seeing it look or smell worse than it did about two
weeks ago, but I will take his word for iv.
i. All I suggest, (and I renew the suggestion), is that we wait a bit and see what the conditions are when the pollu:mm i= really "abolished."
Perhaps, then, we won't have to either bolish the Board of Health or spend \$150,000 "to cut off some sharp bencs.
une 23, 1911.
by four times as many new varieties have been introduced by other dealers. Most of the introductions of others are not now generally even listed." The Burbank plum, which was introduced less than twenty years ago, is now perbaps more widely known than any ooher plum, the world over; but, ho says, "hundreds of better plums have since been produced on my experiment farms." The Burbank potato is now the universal standard in the Pacific Coast States, and is gradually taking the lead in the Middle West. The new Burbank cherry is sold at high prices in Eastern markets. Altogether, there are already above a hundred valuable new plants, fruits, and flowers, "every one of which has proved better than those known before in some new qualits, in some soils and climates. All do not thrive everywhere. Please name one good fruit or nut that does."
The last two sentences are directed at those of Burbank's critics who triumphantly point to cases of failure of his new products in this or that locality. Judgment has to be used; "certain varieties which are a success in one locality may be, and often are, a complete failurea a few miles distant, or near by on a different soil or at a different elevation." The Burbank Crimson Winter Rhubarb has been offered by unprincibled dealers in the cold Northern States, though they must know that it cannot prove successful there. For this new type Mr. Burbank makes the claim that it is the most valuable vegetable introduce during the last quarter of a cenfury. So many fortunes have been made with it in California and Florida that it has been named "The Mortgage Lifter." The chief forester of the Government of South Africa reports that at Cape Town, where all other rhubarbs had been a failure for two centuries, the Burbank Crimson Winter variety turned out a complete success. Yet Mr. Burbank now has a still further improved variety, the Giant, which excels the original Crim. son Winter Rhubarb "at least 400 per cent."
"It is amazing what opposition one has in experimenting, and the ignorance there is to contend with," writes an Eng. lush appreciator of this American's remarkable horticultural achievements. Yet Luther Burbank declares that the greatest inconvenience or injustice he has met is not misunderstanding, prejudice, envy, jealousy, or ingratitude, but the fact that purchasers are so often deceived by unscrupulous dealers who, misusing his name, foist upon the publie green carnations, hardy bananas, blue roses, seedless watermelons, and a thousand other things, including United States Government thorny cactus for the Burbank Thornless. On this point Mr, Burbank writes with feeling. Fourteen years ago the first scientific experiments for the improvement of cactus
plants were instituted on his farms. Eight years later, when the long and costly labor was crowned with success, the United States Department of Agric. culture spent $\$ 10,000$ in searching the world for a cactus of great agricultural and horticultural value like those alrear wivduced on his farm, but the result was a failure; the "spineless cactus" sent out by the Department of Agriculture is not spineless, not safe to handle or feed to stock, and the fruit is small and poor.

Nine years ago Prof. L. H. Bailey of Cornell wrote of Mr. Burbank: "Ire secures his livelihood from the new vareties he sells to seedsmen and nurserymen, but his experiments are so externside and ho tries so many things for the mere zest of it, that he does not" make money"; and he suggested that, some philanthropist could "render a) good service to mankind if he would endow this experimental garden and allow its proprietor to devote his whole energl to research." A few years later the Carnegie Institute undertook that service, but the alliance did not last long. Mr. Burbank now writes that "after haying been under 'capture' for the avowed purpose of 'the benefit of science' for five years by the Carnegie Institution of Washington, flee years of care, leanness, hampering restrictions, and unprofitable conditions, and having dictated to and corrected for their botanists ? several thousand pages, it is a most gracious relief to return to a life free from the red tape of institutional re. strictions, to a life of active freedom." At present, he adds, he has reorganized his whole business and promises to give to the world more good fruits and flowers from time to time. This he will doubtless do.


1911
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$570^{\text {the }}$ nectins fithe club.
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One of the largest rattlesnakes found recently in the Blue Hills was killed Monday by George Elcock of West Quincy. The snake measured 42 inches and had 16 rattles.
$12 a$

## FIELD MEETING, WATERBURY, VT.

The Field Meeting of 191r, held at the Waterbury Inn, Waterbury, Vermont, June 30 to July 10, under the leadership of George N. Whipple and Arthur H. Tucker, came at a time which will be remembered as one of intense heat all over the entire country, but, in spite of this, unless all signs failed (as they are said to do in a dry time) none of the thirty-four members and friends present regretted their participation in the trip.

Twenty-four left Boston in a special sleeper at 7.30 P.M. and arrived at Waterbury one and one-half hours late, at five the next morning, where the car remained on a siding until the breakfast hour at the Inn distant only a stone's throw from the station.
We were pleasantly surprised during the forenoon by a call from Mr. Graves, Mr. Smith, the Rev. Mr. Newell and the Rev. Mr. Boicourt, representatives of the Camel's Hump Club, who came to give us greeting and offer us the freedom of the mountains.
In the afternoon seventeen enjoyed a beautiful walk under the lead. ership of Charles Fisk, a local guide, engaged by Mr. Davis, proprietor of the Inn, at his own expense, for that purpose. He took us to Blush Hill where we had fine views of Mt . Mansfield in the north and Camel's Hump on the west.
Perhaps it is worthy of mention that on Sunday morning almost fifty per cent. of the party attended church. In the afternoon nine took a walk southward to a hillside commanding fine views.
Monday morning at eight o'clock twenty-five started for Mt. Mansfield, going to Stowe by special trolley car and driving from there by team. Some drove to the summit while others walked from the base. We reached the Summit House in time for dinner and and spent the afternoon rambling at will over the broad ridge of the mountain, from the Chin, the highest point, to the Nose, just above the hotel. The air was hazy with no possibility of distant views. The evening was spent on a ledge of the Nose looking toward the west.

Tuesday we returned to Waterbury, reversing our route of the day before and varying it by a visit to Smuggler's Notch at the eastern foot of the mountain. Seven reached this by the bed of the outlet of the Lake of the Clouds, a pleasant trip for those who enjoy a rough scramble. The Notch is beautiful in itself and contains two very interesting things, a boulder about forty feet high which fell from the western side in the Spring of 1910, and a spring under the eastern bank, near the road, discharging enough water to make a very respectable river flowing out of the Notch.

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to Lest. Fine mosuin teave caucur ax g, 30 Thu Qumber quite a hunter $\frac{}{\square}$ woidsman. Tre walked romot to ruins if hafayette house $t$ the Trakers mut bifore dinmer Pin to hobler farm: met him driving terthe village, we tipx on tothe house to su in the barn the nests othe chmney swallows, these birds have nextet for several jears inside, the harce " mader one plptie entranceinolios in the haylapt is a canneal heats of the droppugs fitw birid matiing a real guano hill. Thr Malher Faxon had heard of the owiff restim this way in learus, but had nëver seen the neato. The met Thobli conning back as we canne oun the rowo. The fame beantipue -arle semer Autrmm view as in puot years
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9573. I think the following poem may be the one asked for by S. H. S.

## YOU OR I

L. K.
(Every Saturday)
If we could know
Which of us, darling, would be first to go, Who would be first to breast the, swelling
And step alone upon the other side-
If we could know!
If it were you,
Should I walk softly, keeping death in
Should I my love to you more oft express?
Or should I grieve you, darling, any less-
If it were you?
If it were I,
Should I improve the moments slipping by? Should I more closely follow God's great
Be flled with a sweeter charity to manIf. it were I?
If we could know!
We cannot, darling, and 't is better so, I should forget, just as I do today
And walk along the same old, stumbling way-
If I could know.
I would not know
Which of tis darling, will be first to go, I only wish the space may not be long But when the parting and the greeting song But when, or where, or how we're called

I would not know.

Aブ AUTOMOHRLE OWNER INBORSVS S'THRFy's STASM

## To the Ealtor of tho Transerint.

intrude into youl correspondence column only beoause I feel it a duty to publiely second the protest of my friend Storey against the general Indifforence to the death-dealing automobile, We have made the fatal mistake of allowing the operator of this machine to assume that its capacity lor spes 1 gives it superior rights in the road. The fact is, and the law, that it has no more or other rights there than any woman or chlld, or even a chlta at play: for the law recognizes that children wili play in the street without withdrawinc its play in the street, without withdrawing. Its knows now irritating chllaren and slow dull or frightened people sometimes are but they have a right to be there ana bir inust be dealt with accoordine to thelr ture. The law properly construed and ap plied, protects them. The courts do not enforce the law.
The present dlsgraceful sltuation is almost wholly due to dlsregard of one simple legal principle, which is to be read into all the speei statutes, namely, that a dangerous machine in the publle stretes mulst be handled with a degree of care proportioned to its dangerous oharacter. Apart from to 1 is dangerous oharacter. Apart from
all statutory speed 11 mits, it should at all all statutory speed limits, it shoculd at all times ant in all places be under such control as to avoid endangering lite or limb the, of course, requin and realiction of the usuathinger more.
The apnication of this rule, which ousht to have teen made from the begtaning by all in luthority, would cast the blame probably of ninety-nine in a hundred ea the "accidents," as we call them, where 1 properly belongs, upon the driver of the machine ard equally upon the owner tif he the iar ia being driven so happen becails 3 the cor in ases-in the fration of the danser anises-in the fraction of a rule and hale a dozen fall sentencos in the rule, and hall a dozen Jatir sentences in the early slages of the bisless, on che owner no less than the driver, for whose condue he is, whe have kept the ragds respoz wio, would and now roads sufe. Ent we degan wave Interests have arisen which whimake 1 meir business them aracticaliy in our lolly havo given them-brackealy the right to run. down anyoody who does not jump ror his life an bla is attachea to the where by a highly enlightened-nollceman, pollee court judge or highway commissioner, and there is an end of it. The mother weeps the frlents send flowers, and the altomo bile is off again, at forty miles an hour.
It is sald, and probably is true, that the automobile is now klying and matining more peopie, The slaughter who victims vecoreling is pons so appalins courts and the peopha, and possibly tho courts ana legislature. 0 their senses,
Fiven this is not the worst of it. WW have 10 ws, such as they are. The automo bllo spits cont it or her them, an't is do ing more than ail tor in to inspire contempt cor all law. The average chauffeur, and the average owner, laugh it it operily. The machnes of caree gol ernors of Massachusetts have ween stoppen on the roal cor hewspapers and the puonc mace a joke of it. The whirswind tour of the politica campaigner, from, the President of the Unitedi states cown for the Common Councll, involves utter atsregita of. it, as everybociy knows, and noliody canes: What can we oxpect of a young
tellow in his teens ontrusten witls an allseration is trilnle of law in general, in the the equhy publte examples?
I speak without prefudice, and-wlth some krowloage of tho subject, us one who is now usiag his, thira autompone, I havo never injured so much as a chicken, hor cound any great armeuty in avoiding it, although my ow rectess almoal dally put in perin uy some callroal or passus me at ralroad speed whout note of at the small minority who try persence of the with use the ar the shety of athers ad the he rigns all to protest amalnt the wtiantan that makes it an ensine of ter unl ror and all association with estepreb

Bostorn Nov, 3

## LETTERS TO THE EDITOR

J. MURRAY NORRES ON THE AUTOMOBILE

To the Editor of the Transcript:
Your recent letter from Mr. Moorfleld Storey' and Mr. A. E. Pillsbury are jugt protests and rightly describe the dangers to pedestrians, chlldren and motorists themselves from these engines of destruction.
Had the evil been foreseen at the outset it cannot be belleved that such machine world ever have been allowed such general and unrestricted use of our usurped by country roads as they have We arped by concerted action.
me are a long-suftering peaple in of automobiles with the increasing use shown ay atiles and the great disregard fours by so many owners ana chautmeasures were measures were taken to lessen this killing and malming. Probably more than 90 per cent, I was about to say 99 per cent nacluains the sane portion ot altomoblists themselves, would be thankin to see this reign of terror cense and the inconsiderate owner and driver summarily dealt with in such manner as Mr, Pillsbury points out.
The world has never witnessed, in my bellef, such merciless and unnecessary kuhng and maiming, such alsregard of the law and safety and rights of others, as is occasioned on our streets and country roads by scorchers, by men and women ignorant of the rules of the road or learning to run a car and at the same time learning to scorn the law and the rights of others, and often by chauffeu-s rurning alome without the eye of their owner upon them.
It seems as if, the average person loses proper regard for the safety and constderation of others as soon as he or she enters a machine and prepares to run an engine along the hlghway through crowded streets and past haiting trolley cars as if the question of speed was their only thousht, although the loss of a moment or two is cenerally of not the least. Importance to them I speak as the owner of on outomobile and one who is mucin on the roed ebin clally, on horseback. The roads are madn kery freasy and sllppery on acrount of use of automobiles: a horse with or tha spirtt to keen on his leas may tale machlnos with comparatlve gut if sive fair considoration but it is mire tha. be expected of him when they scorch past with throttle open and horn blowing, and it is my nad expeiance the blow, ana incres.sing proportion of the a large and these machines will. Orme operators an the gilter oi pase erowa my horse into the gutter; or pass within a lont or. so of lack of considerrage, with an absolute lack of consideration for the rights or sarcty of others. I could cite cases where maches tave come on me at excesslve speed and passed on elther side of my horse and many other instances that can hardly be credited,
Thus we see that there is Ittle safety, and less pleasure, for anyono who vehtures upon our streets or country roads, on foot or with a horse or even in his machine. There are many persons who look upun white hair (and whiskers) with mote on less reverence. I possess both, but they have fatled to save my being crowded into the gutter by many and many airuthless automobljst with his open throttle, clan ing horn and unlawinl speent
I am zolng to put my niame to this comimunication for any little weight it majo carry with sane and reasonable persons, cor f know that my exmeriences on tho who love and use the horse; or who love and respect. h1man life and lumb $I$ - will ana so theindo thio man ane tud ther also inctuco tho many aged nitid timid perwalks by reason af this disaracefuli, relgn walks by rcason of this discracciul, relgn
of terror; Perchance some frlend may reat this, one who is reasomably sane in other subjects, and he or she may derisively say subjects, ar he she may derisivaly say that he of she knew moblles. Let that pass: they belong to that claks who never owned a horge; or who cannot: or will not appreclate the dnngers to the publlic and themselves: caused by the great number of reckless and inexperienced operatora of automohlles.
It is high time that concerted actlon should be taken to bring the people and the courts to their senses regaraing this increasing recklessness and lack of oonsiderafion for the rights of others.
mitom, Nov, $0 . \quad$ J. Murbay Forzes
$190$

1911
Y Dee Thurniay; met $C E 7$ at trazlewod Tue prakiked theo Grewi wood fortrok ore (Dark Roas where \& pot inoovivardia areolata that \& ow torto Furlout Ret por Bower on lasgow the orker Pug: Thew baek THe Carnolroacy on" Drarginal Foai rver a puex. Avamp Where hooovarien virginica prown in feleuty. Dhatoun linue or on texe timey marn or a Mndth e.E 7 lix his cegar ly the bunive-plaos raine in the bject geapo ore mn beird obera flapo. at biaplervorid fer the aboretiu of the 1,35- for Rea owebe Joun also a fine grovory miled Betula Baportfeca. woth whuch C. Eqpor fliand
$192$


# A JCERRY CHRISTMAS <br> to you, a peaceful Christmas, a useful Christmas and a comforting Christmas. A Christmas to look back upon with pleasure, a Christmas of unruffled brow and smiling lips, a Christmas that will find you merry and leave you glad, and if you can think of any other nice sort of Christmas for yourself, that also is wished you by 

William L. Richardson

225, Commonwealth $A$ venue,
Boston

9673, Michael Angelo gave Moses horns because he read in his Latin Bible, in Exodus xxxly., 29, "Ignorabat quod cornuta esset facles sua," where the King James' version has "wist not that the skin of his face shone." The Hebrew word which is rendered (rightly) "shone" is derived from the Hebrew word for "horn," which came to be used for "tlashes of light." The Latin version, with its "cornuta," and the use of Lorns as symbols of power, together led to a habit of representing Moses with horns springing from his forehead.
L. W.

In the statement found in Exodus xxxiv.: 29-30, that when, Moses came down from the Mount "The skin of his face shone," the Hebrew word rendered "shone" signifies to send forth, to emit. Our translators considered it to mean sending forth rays of light, and hence their rendering "shone." The Latin Vulgate, however, infuenced doubtless by the fact that the Hebrew word for horn is derived from this verb, strangely rendered it "was horned." Sculptors and palnters who were gulded by the Vulgate, consequently represented Moses as having horns. It may be added that the Septuagint version (Greek) renders it "was made glorious," and with this agrees St. Paul's relerence to the same event in 2 Corinthians: $3-7$, when he speaks of the "glory" of the countenance of Moses.
F. D. B.

In Exodus 34: 29, 30, 35, where it is said of Moses that the skin of his face shone,
the Hebrew verb, meaning "send out rays," is derived from the noung meaning "horn," The plural of this noun is used in habak kuk $3: 4$, with the evident sense of "rays." Now in the passage from Exodus the Latin Bible has cornuta, cornutam, which is rendered in the Doual verslon, by "horned." It was evidently on the Vulgate rendering then, that Michael Angelo based hls notion. In comparatively modern picture one sometimes sees rays of light proceeding from Moses's head at the points where horns would naturally appear. A. S. C.
Michael Angelo put two horns on the head of his famous statue of Moses, because many artists had done the same thing before, and because in the Latin Bible (vulgate edition) Exodus xxxiv,, verse 29, it says that "his face was horned," as translated in the Doual version of 1635. "And when Moyses came downe from the Mount Sinal, he held the two tables of testimonle, and he knew not that his face was horned by the conversation of the talke of our Lord. And Aaron and the chil dren of Israel seeing the face of Moyses horned they were afraid to come neer," A marginal note says: "So his face appeared to the beholders by reason of the gllstering beames of his countenance. shining gloriously, after his conversation with God fourtio dayes." Our so-called Engltsh bloles, so far as. I know, follow other transiations than the Vulgate of Jerome, at least Covendale's Blble of '1635 translates verse 29 a.d follows: "Now when Moses came downe fro Mount Sinal he had the two tables of wytnesse in his hande, and wyst not that the skinme of his fase shyned because the had talked with him." And Schmidt's Iatin Bible published at Strasbury, 1596, translated from the original tongues, has the same rendering in not from the Hebrew: "And Moses did not know that the skin of his face shone While he was speaking."
Fabricius (1516-1571) a German scholan and archæologist, called attention to the it wrew nord for horns and showed that word meaning shining for a very similar boam meaning shining rays, or bright beams, and this view is adopted by Sir Thomas Erowne ( $1605-1682$ ), the English essayist ana medical writer: one chapter of his "Vulgar Errors," book v., capter 9, en. titled "of the picture of Moses with horns" is very interesting and instructive, considering the state of blblical criticism in his day. The question whether any Oriental symbolism finfuenced the earlier artists and sculptors has been mooted, but it probably did not occur to Michael Angelo Bible. he had such a plain text in his own

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BLUE HILLS WEATHER REPORT. :
December Notable for its WarmthSummary of the Conditions During , 1911

December was notable for its warmth, the absence of snow and of other charincteristice of winter. The mean temperature of $3+.7$ degrees was 5.3 degreas above the normal and the lighest for December since 1891. Last year it was 23.7 degrees. The maximum temperature of the month was 65 degrees on the 12 th and this is the highest temperature in December since December 14, 1887, when 68 degrees was recorded. The lowest temperature of the month was 11 degrees on the 5th. The temperature rose above freezing on all except four dilys and from the 6th to the 14th did 110. fall below 34 degrees.

The total precipitation of 3.24 inches Was .56, inch less than the normal amount and nearly all in the form of rain. In D)cember, 1910, the total was ".59 inches. Rain fell on eight days and the most in one day was 1.32 inches on the 2.3 d . There were measurable snows on the 15 thi and 31 st and the total fall was 5.5 inches. There was the average rclative humidity, the mean for the month of $\gamma 4,4$, per cent. Being for the month of
The total amount of sumshine of 117 hours was 11 hours less than the averwe and there was somewhat less than the average and there was somewhat more cloudiness than usual. There was little wind except during the closing days of the month, and the mean hourly iclocity was the lowest on record for 1) ecember. The maximum velocity was ot miles per hour from the west on the 2sth. The prevailing wind direction was west

Abnormally high temperatures in January, May, July and December caused 1911 to average as a warm year although the ejght otner months were ali somewhat cooler than usual. The mean temperature of 47.8 degrees was 9 degrees above the average and the same as in 190. 1911 is the fourth consecutive year to be warmer than normal. The temperatures departures of May, July and December were remarkable, May beinge the warmest month of the name in 31 years, July the warmest on record and Derember the warmest in 20 years. Inprecented temperatures were experienced in July, on six days maxima higher than before recorded loeing obhigher than before recorded being ob-
served. served. the lighest reached being 99.3
ilegrees on July 3rd. There were no ex. ilegrees on July 3rd. There were no ex-
t.temely low termperatures, the minimum themely low temperatures, the minimum
for the year lieing one above zero om for the year
February 6 th.
Like the three preceding years 1911 less degreen, the total of then, then is at heing 1.35 inches leses tham nomul and the most for any year since 1907 . Jun July, August and Vovember June, only months with more than the the age rainfall August being the wettest month of the year with 6.70 wettest May was notably dry, with a total rainMay was notably dry, with a total rain-
fall of only .89 inch which was the fall of only 89 inch which was the
least for May on record. During the least for May on record. During thic
year there were 45 inches of snow which was 17 inches less than nomal. There was a marked absence of snow in January and December, only one inch falling in January and in December nearly all the total fell on the 31st. There was an excess of snow in April, the total fall of 10 inches being six inches more than the average.
There was slightly more sunshine than usual, but the total amount of 2260 hours was the least for any year since 1907.: There was a slight excess of cloudiness and nearly the average relative humidity. There was little wind throughout the year, the mean hourly velocity being the lowest on record at Blue Hill. March was the only month Bith anormal wind movement, all other
with with a normal wind movement, all other
months having less wind than usual. January, February, August and DeJamuary, February, August and De-
cember had the lowest wind movement cember had the lowest wind movement
on record and August had the least wind of any month thus far observed at Blue Hill. The maximum velocity of the year was 67 miles per hour from the west on Dec. 2sth a there were few other gales. The prewiling wind $\begin{array}{ll}\text { direction was west. } & \text { L. A. Wells. }\end{array}$ Blue Hill Observatory
January 1, 1912.
the botanical society of washington
The 74th regular meeting of the society was held at the Cosmos Club, Tuesday, October 10, 1911, at eight o'clock P.M. In the absence of the regular officers, Dr. Albert Mann presided. Twenty five members were present.

The following papers were read:
The Wilting Coeffcient for Different Plants and its Indirect Determination: Dr. L. J. Briges and Dr. H. L. Shantz. (Presented by Dr. Shantz.)
The Forest of Arden, a Dream: II. C. Skeels.
The Forest of Arden is a 300 -acre tract of native woodland, three miles east of Joliet, Inl, in the valley of Hickory Creek, and forms a part of the 2,000-acre estate, Harlow-Arden, of Mr. H. N. Higinbotham, of Chicago. The creek is dammed in three places, with locks throngh the two upper dams, giving a mile and a half of boating. Five miles of gravel drives have been laid out, the purpose being to display the landscape beauties of mixed meadows and woods to the best advantage. Along these drives, beginning with the ferns and following the accepted sequence of plant families to the composites, there has been planted a botanic garden of 2,000 species, room being left for as many more.

Each species is located by its place in the sequence, and by a map, cross-sectioned to square 100 feet on each side, accompanied by an index giving the plant names and the number of the square on which each will be found. There are no formal beds and no labels, but the speeies are there, to be seen by those interested.
The eleventh annual business meeting of the society was held on Tuesday, October 24, 1911. Officers were elected as follows: President, W. A. Orton; Vice-president, A. S. Hitchcock; Recording Secretary, Edw. C. Johnson; Corresponding Secre tary, W. W. Stockberger ; Treasurer, F. L. Lewton. The executive committee reported an active membership of 104, there having been nineteen accessions during the year.
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[^2]:    

