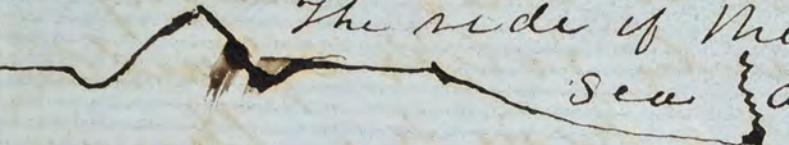


and receive the resin from a metallic cup fitted in the trunk for the purpose, when the sap does not flow straight, but inclines to the bark as it does in a crooked tree (and in fact in many that are not so apparently very perverted) it is guided back by inserting the shell of cuttle fish obliquely.



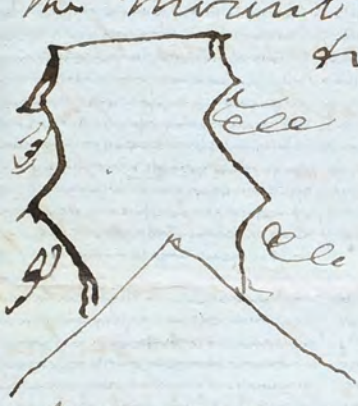
Sap is not now flowing. For half a mile along the Adour at its mouth, on each side is a heavy wall and on South side a wooden break water of open work timber, projects into the sea. Great reefs are there to help in vessels. The mouth is narrow and quite a sea was breaking all across it, on a bar. A man was fishing at the extremity of the breakwater, & caught a 1 1/2 lb fish ~~little~~ much like our weak fish or Scuratey. But one solitary viper was to be seen during the 3 hours I spent on the beach, there was not a shell, a bird or even a sea weed ever on the shore, save half a handful of rocks weed. I saw two flocks of sea coots, and an eagle but not a gull, even beside - The tufted Lark is a little back from the shore, I enclose some delightfully high odoured Chamomile growing on the beach with yellow flowers, one kind like the Amaranth indeed. I also shall send seed, I enclose some varieties of beautiful pinks from the shore also, one kind white, The sweetest time imaginable & straight grass abundantly also & the purple Autumn Crocus now in bloom. The beach will dry to drive on at low tide, Back of the tide table it is very wide & 1000 of acres are thinly thatched with pine boughs so one cannot walk out the paths that are left, without treading on them, they are matted down with peat & sand, and young pines are coming up which otherwise would be blown out the ground by the sand drifting from the roots - as far as I could see North is a pine forest over the Sands, coming down to within 300 yds of water. I suppose the Sands back of our benches might be remarkably

and profitably appropriated, some 200 yds from the water is a ridge (apparently artificial in part) running a mile or two parallel with the shore, about 15 feet high



The side of this ridge from the water sea about 40 or 50 feet wide is a very well - a slight fence 3 1/2 feet high on top the ridge, made of corn stalks thatched to cunes with faggots for posts, helps further to protect from the sea another fence is at the bottom & then cross fences at short intervals - The soil is dry sand - Apuragus is also planted in them and very vigorous peas just up, for early next spring I suppose (we had strawberries at dinner to day) Tamarack cuttings are stuck out (about 6 inches deep) in the sand all exposed to the sea, but are growing well apparently regardless of sea wind & salt. One small pond is behind the beach, but they are rare in Europe, though almost always concomitant with beaches in America. An interesting question & difference, for geologists. The breakwater is not 3 miles from town. I walked nearly 3 miles on the beach & shore to Barritz a famous watering place, small town of new houses - with fine great rocks in the sea just front just off from the beach. The emperor's new house is modest enough for a rich English iron master, pleasantly situated with a lot of some 30 acres fresh planted with evergreens. The fence is just like that of the Keep 15 acre lot in South New Port but not half so well made, or neat. Just south of it on a chalk cliff stands a beautiful light house, I think 150 feet high. A mile back the old beach shingle 100 feet higher than the sea has a rich black soil, from 1 to 3 feet deep, apparently all formed by decay of heath & grass now abundant all over this region. I returned to Bayonne from Barritz by the beautiful walk in the road of about 3 1/2 miles, a cheery & cheerful

Cotton mill, with broken windows and (27)  
a dirty thrift of looking concern, a little further  
up the stream we came to a new and larger one  
that looked promising. About the <sup>same</sup> stream, at the  
base of the Pyrenees, I saw several Owls, and  
for the first time, two of them were diving about in  
the water in their peculiar manner. A very large  
hawk or Eagle was soaring about. The houses have  
very often gloomish eyes - and peculiar chimneys  
to be found (I suppose) against the eddying wind of  
the mountains above them. The smoke coming out  
from under the projections. The Pyrenees



as mountains are by no means in-  
teresting when I passed them - They are  
not high & exhibit very little gran-  
deur of ravine or cliff - ~~The~~ rail  
way over them is progressing, that will  
soon open Spain to the Atlantic light. The farmers  
had many stacks of ferns near their houses for fuel  
in the stables. The remains of only 2 or 3 old carriages  
are seen between the Summit & Bayonne. I had  
reason to congratulate myself on not taking the  
ottoman seats, the passengers complained of their  
being very uncomfortable as I suppose they must  
be for any length of time. Seats in continental dilli-  
gences are generally uncomfortable, and each passenger  
ticket is made to designate his seat accordingly.  
The villages were numerous, and in two of them I saw  
"Fosfores" manufactories - <sup>Quartz stones are also made from the</sup> ~~leaves.~~ <sup>leaves.</sup> Descending the south side  
of the Pyrenees it became too dark to see, but I noticed  
enormous houses between them and Vittoria, even  
larger than the sweep. At Vittoria we are considered  
to be in real Spain - It is about 30 miles from the  
Pyrenees and we arrived there at nearly midnight  
to our second meal that day. At light in the mor-  
ning we were passing a gorge of rocks very wild & picturesque  
with old fortifications on the summits of grotesque crags  
of blue. The very place for bandits, a miserable village  
thereby - Since forward all the way (some 250 miles)  
to Madrid is a scene of the most dismal waste &  
sterile desert imaginable - not a stream once in  
30 miles, not a tree save those planted by the road,  
and very exceptional spots near streams where  
are orchards of Plums to a great extent by one, with  
Pears & apples. not a green thing, the grass as dead  
as winter nearly and very rarely any to be seen -  
yet it is not sterile land, but productive. A  
great portion of it under plough. These implements  
are of wood shod at the point with a piece of iron

with a handle for one hand like that of a Carpenter  
 saw. The soil is very lumpy - Their carts are on  
 wheels with thick wooden tires instead of iron ones, and  
 by no means round, only circular, The people are  
 the poorest looking I have seen in Europe, for the Rus-  
 peasant or slave is duped comfortably, these are  
 not, and look poor through out - The other side of  
 the pyrenees in Spain, shoes of white woven cloth nailed  
 to wooden soles are common, especially for boys, but here  
 they use "leggings" of skin or cloth or both and a sort of  
 sandal or mocassin, with their legs bound about with  
 cords like our indians, a ragged brown monkish  
 looking cloak of heavy material, leather chaps with  
 sheep skin with wool outside, tied over them are the  
 common dress in some parts, but every where miserable,  
 a hat with wide rim and rosette on it, with another  
 above it on the edge of the crown of the hat, a beribboned  
 cap showing only a zone of the rim is very common.



Villages are farther apart, and more & more mis-  
 erable, reminding me of those in the East, many of  
 them built of huge unbaked brick, mixed with  
 straw, with hovel under ground on the side hills  
 for their mules, donkeys, &c - Stone crosses are not un-  
 frequent by the way side (rarely seen in France when I was)  
 and churches singularly large well built in fact  
 grand in contrast with the the dwellings for the bodies  
 of them whose spiritual welfare seems so voluntarily  
 consulted. The spires are low but very pretty, The  
 beggars who commended with Spain soon came to  
 bent us in number every time the coach stopped,  
 after leaving San Sebastian, I noticed the knocker  
 of many of the doors was on the door post or frame  
 & not on the door. At one town we were overhauled  
 by Police who looked as much like brigands as well  
 could be & did not behave much better, I thought.  
 One fellow (not of them I presume) demanded of me  
 half a frank for Police service. I called the con-  
 ductor, who at first appeared to favour his demand  
 but ended by cursing him. Children very ragged,  
 and people sit in sun to be warm under hilllocks &c.  
 Small birds are numerous & I saw a dozen small  
 hawk & as many large ones (some of which were probably Eagles)  
 from bay of Pyrenees to the Adrid. The much used carts  
 generally drawn by 6 mules, are numerous on the road  
 (all going or coming from Madrid apparently) and  
 are well and strongly made, and loaded under the  
 wheels as well as above, The carts & waggons of Europe  
 generally have a hanging platform under them like a  
 hanging shelf, on which small articles are placed, but  
 these are regular portions of the capacity for load, and  
 made like the rest of packing of nap - so the cart body

Sometimes these ridges lay in shape of horse shoes, and in one instance forming about 15 acres of fine sloping land. The ridge being at an angle of about 70 degrees with the earth & 6 to 10 feet high. Not of rock which sometimes form similar ridges with us - Madrid lies in a valley and approaching it I saw mud struck from the hill above with its numerous spires & domes that make a fine sight of the city and a vile place of Spain and every country they so much infect. I think Spain is even viler than Italy, thus far, Vehicles take the left hand in the road and in Madrid I found our long team walked slowly while others of ~~left~~ hawks & drove on the trot. A great Caralascar passed me on my walk this afternoon of 3 large coaches 6 horses in one, 6 mules in another, and followed by some 30 horsemen, all going at a rapid rate, with men mounted in front with drawn swords clearing the way. I suppose it was the royal family & suite. There is one blessing in Spain at least, very little cracking of whips. Over the great extent of good land the people live in villages & appear as comfortable as the Bedouin Arabs - not this side of Pyrennes have I seen the least attention to any garden of flowers or trees or other evidence of any sentiment of refined character - Shepherd's ye poets & a Spanish shepherd, and his inhabitants. He is himself a sphere, a world, a place of refuge. At Burgos we stopped an hour close by the famous Cathedral. Its interior filled me with wonder, but it is rather wonderful than fine, ~~though~~ upon the whole, though portions of it certainly are beautiful. Its great treasure is a paucity of Michel Angelo which did not particularly strike me, though I passed before it without knowing it was his. Two artists were copying. I saw a load of bituminous coal at Burgos, must have been carted far. The fuel of Spain is chiefly such bushes and roots as grow on the barren uncultivated hill sides, at least between the south base of the Pyrennes and this city, I saw the poor creatures sitting in sunny places with their pigs lying beside them, apparently destitute of all the blessings of life but I dare say they have as much content as any body. Heavens grand reserve for the poor. There are many dry beds of torrents, but I do not think there is a stream of less than once in 30 miles, (this side the Pyrennes) and



attached is a gallery - 4 stuccos are (44)  
here, considered the best in Madrid, they  
did not strike me so, but the scene of  
Sunday healing the sick is extremely pleasing.

Toledo 11m 9. 58

I came this morning about 55 miles by rail  
from Madrid. The fare is lower than usual  
2d class 26 reals, about 12.5 ct. The cars  
are poor - track single & rough, fuel  
coke, speed about 25 miles per hour. The  
bridges are generally of wood, not a single  
modern stone is on the way, no villa, even  
about Madrid - I saw a dozen large hawks  
and several smaller ones, indicating many  
small birds, Sparrows abound & others, plenty of  
Magpies & I saw a flock of Lapwings, a most interesting  
bird. There is <sup>also 2 water witchers!</sup> a tree excepting on the bank  
of Tago where are some nice tracts of wood, chiefly oak,  
and also groves of wild Silver Poplar still green but  
bit bitten. Apples & Pear orchards & some peaches also.  
The same distribution that characterizes North of Madrid  
continues, but there are many vineyards. The vines  
are short stumps a foot or two high, from the pruned  
of which, are each year produced the new fruit  
bearing branches, & sustained by sticks. There are  
likewise on these barren looking miles, many  
olive groves which are planted (each tree) separately  
distinct from the mass to contrast with the gray  
surface (or red often) around it, looking where  
nothing else is green, beautifully so at a distance.  
Considerable stubbing & Hazel are also in the Valley.  
Water is raised from the river and wells for irrigation  
on the same sort of wheel which the Egyptians use.  
There are numbers of sheep, some of the flocks consisting  
of nearly all black. Many lambs a few weeks old.  
People are ploughing with mules & a sharp stick defended  
with iron, and sowing grain. Digging potatoes also.  
The chick weed is here but I miss big grass for a long  
time. The country looks as if it had been a prairie  
of clay, washed into inequalities by flood. There is  
plenty of rock nevertheless. All the way from the Pyrenees  
we see flat table elevation far above the rest of the country  
which I think must have been there from the passage  
of a number of towns large churches in  
all of them, besides isolated ones on  
many hills, that I suppose were convents

and a fine building apparently an academy with many granite columns of Ionic order has lately been built apparently. From mathematics, up to morals, and down to the principles of their faith are taught there. Many old mason arches and gateways especially in the gates of the city are seen. The great thing is the Cathedral. I have never seen such an one. The exterior is not much, but the grandeur of column and simple pointed arch of 5 parallel orders within, exceed all I have ever seen of the sort. This is 400 feet by 200 within, and though St Peter at Rome is so much greater this has some decided superlatives to it to help compensate. The beautifully arched cloisters attached are also of large extent. Some of the chapels are exceedingly elaborate but mostly with most laudable designs and execution so far as the figures go, though there are some pretty things in white marble. There are several paintings that look well in the gloom at least. The stained glass is abundant, and very beautiful, but apparently new. The great shafts 10 feet diameter that support the arches that crown the middle aisle, are bent in ward toward the summit, as if they were lead, but every thing appears to be sovera nevertheless. I think I have often noticed this in old black iron columns. I suppose each joint in the masonry yields a very little, so that no fracture is apparent, though the elevation be considerable. The roof is simply of tile & slate, & open nothing remarkable. The doors are best with beggars. The Tago is in a rocky ravine here & has <sup>not larger than our</sup> pretty green water. It is dammed for mills as the town is for all sorts of fifth besides an archbishop who has a palace here by the grand cathedral. I see our old Spanish Potarons (20cts piece) in circulation but no 6 1/4 or 12 1/2 ct pieces. There are silver reals (5cts) and 2 real pieces 10cts. The 2 real pieces I think we used to pass in the United States.

Alicante 11 mo 11. 58

Left Toledo by rail yesterday morning & came some 300 miles to this place. The same level, tules, chert waste continues all the way from Madrid, with here a stream and very much waste land, where I saw some thousands of sheep, nearly all black. Not a fence is seen, and the rail way is only protected by shepherds & houndsmen from sheep & cattle, a rather singular fact, for I saw no cattle. Shepherds (children chiefly) appeared at the cars, at some of the stations. On the plain occasionally were isolated conical peaks. Some of them very handsome, a long line of mountains could be seen