

**Marsh asked Felch if he will begin to work for him.**

Yale College Museum  
New Haven, Conn.

Feb 27<sup>th</sup>- 1883

Dear Mr. Felch,

I want to start a party digging out fossils in your region before this spring and write to ask what the chances are. Can you yourself take charge and can you get Mr. McGee (or some other experienced man) to work with you. I think two will do to begin with.

I should like to start things by April 1<sup>st</sup> if possible. Please let me know about these points, and what you and McGee want a month for your services if you take hold.

Also inform me what Lucas has done with the fossils he had, and whether there is not a good chance still on the hill where he worked He has certainly no right to more ground than he is working on , at any time.

Yours truly

**Marsh gives Felch instructions for getting started.**

Yale College Museum  
New Have, Conn.

March 17<sup>th</sup>- 1883

M.P. Felch Esq  
Dear Sir,

Yours of the 8<sup>th</sup> inst. was duly recd\_

You may make preparations for beginning work April 1<sup>st</sup> at the price you name, \$75. per month.

As soon as you find out what your tools, packing materials, etc will cost, on an average, I should prefer to put all together at so much per month and add this to your pay. This will make the accounts much simpler, as vouchers have to be given for all government payments. So also any expense of carting specimens to the station to ship etc.

Please let me know what you will work for if you yourself furnish a man to help you. I mean how much per month. I should like to make one item of it all.

Later I may send someone who knows about fossils to join your party, but this will depend on circumstances. I wish to get some large fine specimens of limb bones and vertebrae, but the small rare things are equally valuable.

I think it will be well to ship specimens at the end of three months, but they should be boxed where they cannot be handled or examined before shipment.

I may come out myself during the season.

I enclose some directions for collecting fossils in another formation, but you get hints from them.

Yours truly  
O.C. Marsh

**Marsh tells Felch he is sending Brown to work with him.**

Yale College Museum  
New Have, Conn.

March 25<sup>th</sup> 1883

M.P. Felch. Esq  
Dear Sir,

Since I wrote you I have heard that one of my old collectors Fred. Brown, is in New Mexico (Watrous, Mora Co.), and as he wanted work, I have written to him to report to you. I think he will be with you soon, perhaps by April 1<sup>st</sup>. I think he will prove a useful man, as he has had a good deal of experience in digging out similar bones to those you will find.

You, of course, will have charge of the work, and if he does not suit you in any way you may let him go.

I meant to have him work in addition to the man you spoke of securing. So my request for you to name a price per month for yourself and outfit etc, would be quite independent of what I pay Brown if he comes.

I want to push on the work and hence thought three men none too much.

Yours truly  
O.C. Marsh

**Marsh tells Felch to try elsewhere if he can't get good bones.**

Department of the Interior, United States Geological Survey  
~~Washington~~—New Haven,

April 13, 1883

M.P. Felch,  
Dear Sir.

Yours of the 5<sup>th</sup> duly recd.

If the old quarry does not turn out good limb or toe bones or vertebrae you better try the chocolate beds.

There must be good bones near where Lucas worked on the hill.

Yours truly  
O.C. Marsh

P.S. A skull is worth more than anything else.

**Marsh tells Felch to write every week.**

Yale College Museum  
New Haven, Conn.

May 14<sup>th</sup> 1883

M.P. Felch

Dear Sir.

I have heard nothing from you or party for about three weeks, and am anxious to know how the work goes on.

It is important for you to write me fully about the work at least once a week. At the end of each month, I wish you to send in your account in the form of a bill, stating your items so that I will understand them. You can put on the bill Brown's wages.

Yours very truly

O.C. Marsh

**Marsh sends first payment.**

Yale College Museum    New Haven, Conn.

May 23 1883

M.P. Felch

Dear Sir.

Yours of the 17<sup>th</sup> inst is at hand and I enclose my check for \$155. as you request. Please send receipt.

Write fully about work once a week at least.

Yours truly

OC Marsh

**Marsh sends another payment and instructions on how to pack and send specimens.**

Yale College Museum  
New Haven, Conn.

June 14<sup>th</sup>- 1883

M.P. Felch.

Enclosed find check for \$160, which with what I sent before (\$150.) will make the average you named (\$155) for two months, or to June 1<sup>st</sup>. Please send a receipt for same.

In making up the quarter ending June 30<sup>th</sup>, you may correct these figures if necessary. It will save much trouble with vouchers if all the small expenses are brought together in the general average for yourself, team etc.

I will send vouchers for first quarter as soon as you inform me what the average for 6 or 8 months will be, if it differs from your first estimate of \$155 per month.

I will send Brown a separate check by the mail this time and after this through you.

The cigar box of fossils came duly. The little jaw was very interesting as it was a mammal. Say nothing about your discoveries, but try to get some more remains of the same nature.

Send by registered mail, any small things of interest, but label them carefully so that we can put them with the rest of the animal when other bones come in.

Send at the end of each month a statement of accounts, expenses etc.

Yours truly  
O.C. Marsh

(P.S. over)

P.S. Pack the large specimens carefully in strong boxes numbered 1,2,3, etc. and keep list of contents to send by mail. I don't care to have heavy boxes sent on at present by freight.

If you have a skull or good jaws, you may number item and send by Express or mail.

Later in the season you can send a number of boxes together as freight, but not till I advise you about route etc.

M.

**Marsh sends pay through the government.**

Department of the Interior, United States Geological Survey  
~~Washington~~ New Haven

June 18<sup>th</sup> - 1883

M.P. Felch Esq.  
Dear Sir

I enclose vouchers for the present quarter, for you and Brown to sign, as I can get no pay for you from the government till the duplicate vouchers are in Washington.

Please sign at bottom of page and return to me here as soon as possible all four papers. I have made your pay \$160 per month for this quarter. If this does not cover the expenses I will increase it enough to do so after July 1<sup>st</sup> so that the season will make the average all right.

Yours truly  
O.C. Marsh

**Felch has found a few small vertebrae and sent the specimen by registered mail.  
Marsh responds with instructions to deal with more of the specimen.**

Yale College Museum  
New Haven Conn.

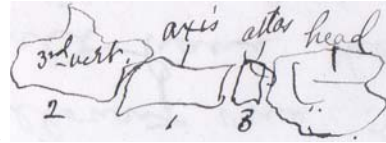
June 21 1883

M.P. Felch Esq  
Dear sir.

Your letter of the 6<sup>th</sup> inst with diagram of the vertebrae etc. (found under femur by JA Smith June 5<sup>th</sup>) came duly, and shortly after the box sent by registered mail.

This specimen is of much interest as it is the back of the head attached to the neck vertebrae. E.g.

The skull is broken off just back of the eyes. The short vertebra is no 1 or atlas, the next



is no 2 or axis, and the long one is the 3<sup>rd</sup> vertebra. E.g.

Now it is important to get more of the head if possible, especially the teeth. Were any teeth found near this head or within several feet of it? If so send them on by mail.

It is also very important to keep the vertebrae by themselves in the order (if possible) in which they were found. If you mark the next vertebra behind the last sent no 2, the following one 3, etc. you will have them all right. Probably they will be displaced further back, but you ought to get the whole set. The vertebrae should have a round ball in front and a cup on the hind end.

Send on by mail the vertebra just behind the last sent. Also send that other small jaw, by mail.

Yours truly  
OC Marsh

P.S. How long was femur found over this head?

(over)

P.S. You better keep copies of your diagrams so that I can refer to them. Don't let any outsiders see them however, and caution the men not to say what is found.

**Writing again on the 21<sup>st</sup> to give more for marking specimens to aid reassembly at New Haven.**

Yale College Museum  
New Haven Conn.

June 21<sup>st</sup> 1883

M.P.Felch  
Dear Sir,

Since writing you this morning it has occurred to me that the best way to mark the localities of the bones found would be to make a map of the quarry showing  
1<sup>st</sup> the old workings.

2<sup>nd</sup> the extensions you make

3<sup>rd</sup> the positions of all important bones found

Then when you send a box, you can mark a line around the bones then sent,



ep. In this way we can keep the thing straight. Otherwise there is great danger of confusion, and half the value of specimens consists in knowing where they lay with reference to others.

If now you name each skeleton, A, B, C etc you will help us greatly. Suppose for instance you call this piece of head sent Skeleton A and all the rest of the same animal, Skel A this will keep it all by itself.

If you have already started on other distinct skeletons, you might call them B, C, etc, as you chose. The main thing is to keep each separate, and have them so labeled that we can make them out here. You might label the vertebrae etc of each skeleton Vert 1A, Vert 2 A, Bone 1 A, etc.

I will send you some red crayons to mark broken bones so that we will know how they



go.

Yours truly  
OCM.

**Marsh tells Felch what the two jaws he sent are and, again, how to mark breaks in bones to make them easy to reassemble.**

Department of the Interior, United States Geological Survey  
~~Washington~~ New Haven

June 27<sup>th</sup> 1883

M.P. Felch Esq.  
Dear Sir,

Your small box sent June 21<sup>st</sup> came today. The small jaw (broken) is a Mammal similar to the first sent. This shows that Mammals are abundant in the old Quarry, and a careful look out for them should always be kept, as they are most important of all.

The large jaw also in pieces is a Dinosaur, and it is very important to know just what vertebrae go with it. Did you find any bones near this jaw that might go with it. Can the small base of a skull (with Atlas attached) sent in last small box go with this Jaw? How far apart were the two specimens?

Next to the Mammals, the important point now is to know what skull and vertebrae and limb bones go with these slender cylindrical teeth.

Please send by mail not merely the axis (2<sup>nd</sup> vertebra) connected with that skull, but also the 3<sup>rd</sup> and 4<sup>th</sup> vertebrae. This will help us out. You can, I think, send one at a time, and keep within the four pounds limit. If not, send a small box by Express containing several of this series of vertebrae.

A few small pieces were broken off of that skull before packing. Can you find them? Every fragment of a skull is important. Write soon about this.

Yours truly  
O.C. Marsh

(over)

P.S. I send you some red crayons to mark broken bones with so that we can easily fit



them together here. [for example] This will save us much work, especially for the small fractures. Also I send some cards to go in the boxes.

M.

**Marsh sends more instructions for shipping. East end of quarry looking good.**

Yale College Museum  
New Haven Conn.

July 8<sup>th</sup> 1883

M.P. Felch Esq  
Dear Sir.

The box containing the two vertebrae came by mail, and was very acceptable. It looks now as if the skull and the 3 vert. are new, but I am not yet sure.

Keep everything found near by itself so that we can know what goes with the skull. You can send by mail up to 4lbs. so it is not not worth while to try to clear off the rock of delicate specimens. We can do that better here as a rule.

For franks for mail packages you better use the slips I sent rather than the envelopes, and paste them on. Otherwise, if the strip breaks the direction may be lost. The East end of your Old Quarry is evidently a good locality, so please keep a careful record of everything that turns up there. Three or four bones that we know go together (like that Skull and vertebrae) are worth a bushel of bones taken out at random.

The sharp claw found by Brown is that of a Carnivorous Dinosaur, probably Dryptosaurus.

The vouchers came all right, and have been sent to Washington.

Yours very truly  
O.C. Marsh

**Thanking Felch for the first quarry diagram.**

Yale College Museum  
New Haven Conn.

July 15<sup>th</sup> 1883

M.P. Felch Esq,  
Dear Sir

Your letter of the 5<sup>th</sup> inst with diagram of the Quarry was most acceptable as it cleared up many points of doubt. By keeping everything mapped in this way there can be little confusion if we also know what bones come in each box.

Package no 5 came duly. The small jaw was a lizard (with conical pointed single rooted teeth) not a mammal as I hoped. The limb bone was a toe bone (Metatarsal) of a Laosaurus.

You did not send statement July 1<sup>st</sup>, so I sent Brown his check separate to enable him to start for Wyoming. I now enclose check for \$160, which please acknowledge.

I have been away considerably of late and shall be still more during August.

Would it not be a good idea to get a "tent fly" or other piece of canvas to use as an awning over the quarry to make the heat less oppressive.

I have not heard yet whether Brown will go to Como or not. I asked him to telegraph.

Yours truly,  
OC Marsh

**Marsh says he may visit in the fall and make better arrangements for freight. Tells Felch he can hire a man to help. Admonishes him to send a lot of bones for an upcoming publication and that he can work at least two more years if the bones hold out.**

Yale College Museum  
New Haven Conn.

July 24<sup>th</sup> 1883

M.P. Felch  
Dear Sir,

I have not heard from you since the 15<sup>th</sup>, but as I am going away for a month I enclose a check for August 1<sup>st</sup>. which please acknowledge.

I would like to have you write regularly, and my Secretary will forward letters.

I may run out this fall and look over the work myself. If so I then will make arrangements about shipped freight. If sent to New Haven now, I shall have to pay myself, but later I can arrange for free freight.

If you can get a good man, (who will say nothing about the work outside,) and can use him to good advantage, you may let him begin August 1. I suppose \$50 per month would be enough, but I leave this to your good judgement.

I sent you a paper on Dinosaurs, (Restoration of Brontosaurus) which will show you what the large animals are like. Do your best this season, as I need all the bones I can get for my volume now in preparation. If the bones hold out, I want you to continue for a year or two at least.

Yours truly  
OC Marsh

**Marsh headed back home from his trip, sends funds.**

Yale College Museum  
New Haven Conn.

Sept 7<sup>th</sup> 1883

M.P. Felch Esq  
Dear Sir,

Your letters have been forwarded to me and I am glad to know the work is going on so well. Before this reaches you I shall be back in new Haven but as you will want some funds I enclose a check for \$200.

Yours very truly  
O.C. Marsh

**Felch has found two skulls and Marsh wants them well packed and sent express.**

Yale College Museum  
New Haven Conn.

Sept 28<sup>th</sup> 1883

Dear Mr Felch,

I am home again, and shall now write more promptly.

I am glad you have found there two skulls, (Nos 2 and 3), and think you better send them on at once by Express. The charges will be great but we need the specimens now, more than ever. You better pack each one quite by itself, and wrap them up very carefully so that they will come without injury. Use cotton and sacks as well as paper where necessary. Plaster will often work admirably when put around fragile specimens.

You may send by Express in one lot all the skull matter you have up to 500 lbs. if necessary but don't risk injury by removing too much rock.

Mark boxes carefully.

Yale College Museum  
With Care      New Haven  
Ct

Also number boxes plainly No1, 2, 3, etc and send me receipt by mail. Send also by mail diagrams showing where skulls 1, 2 and 3 lay in quarry if you have not already done so. Please write with ink, and leave an inch margin blank, as I wish to bind your letters together. You better put business matters on separate sheets, will send you some letter paper soon. I like to keep the scientific history of each quarry by itself, as it helps us in working out the specimens very much.

I hope you will be able to keep Mr. Smith. Even if you have to raise his pay dont let him go. I can give him a good chance later if he will hold on.

Yours truly  
OC Marsh

**Marsh sends monthly payment and request for another quarry diagram and sketches with measurements. Admonishes Felch to use less powder.**

Yale College Museum  
New Haven Conn.

October 6<sup>th</sup> 1883

M.P. Felch  
Dear Sir,

Yours of the 30<sup>th</sup> Sept. is at hand, and I enclose check for \$200. as you request.

I send voucher for last quarter, and have made pay at rate of \$175. per month to cover the extras you mention. Please send statement of full account ahead of each quarter so I can see just what entire amount is.

I wish you to keep Smith without fail. I will do what you ask as to increase of pay etc. If he does well, I will give him a good chance for years.

Yours truly  
O.C. Marsh

P.S. when you have time, during bad weather, I wish you would make out a chart of whole quarry, and with a condensed history of all you discover in it. This will save looking over all your letters. The paper I sent will be the thing for this.

P.S. I am afraid you use powder too freely. Never risk specimens. Make sketches with measurements of all bones of importance before taking up.

**Discusses skulls Felch sent and what else to look for to go with them.**

Yale College Museum  
New Haven Conn.

Oct 15<sup>th</sup> 1883

M.P. Felch Esq  
Dear Sir,

The 3 boxes with Skulls 2 and 3 came duly in fair order. The specimens are both of much interest, especially No3.

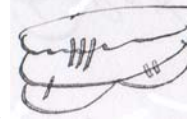
No2, I have today put together except the small pieces. It is the skull apparently of Brontosaurus, with the lower jaws and snout (premaxillaries) lost. Have you found any



lower jaws or premaxillaries (with front teeth) anywhere this skeleton or rather skull? I dont think they can be very far away.

No3 appears to be complete with lower jaws and snout in place. This is the most important specimen from this quarry, and I am very desirous of knowing what vertebrae and limb bones go with it. Partt of the Atlas (or 1<sup>st</sup> vertebra) is attached to the base of the Skull, and the other neck vertebrae should be near. I think this skull may prove to be Apatosaurus, but cannot tell without more specimens from the skeleton.

Your marks made it easy to get both skulls together, but No2 would have gone easier if



you had marked the joints of the rock with your red pencils. The red marks hold on well. The diagrams you sent by mail pleased me very much. You are right about the hollw limbs being Allosaurus. Your diagrams show both hind legs. The odd bone



cut natural size is a pubis, and the pair about the same length are the Ischia. (See my pamphlet on Juras Dinosaurs Part II, plate VIII.) These diagrams were just what I wanted. If you can make the exact length (in feet and inches) on each bone, we can restore the specimens with certainty even if badly broken. I want to make restorations of the fore and hind legs of Allosaurus as I have of the other groups. So look out sharp for the fore legs. They will not be more than half as long as the hind legs, and the claws will be flat not round. There will be 4 or 5 fingers in the hand. In all Carnivorous dinosaurs the bones are smooth, fine grained and more or less hollow.

Look out for the sternum in all cases. It will be near the Coracoids, and be one or two flat bones, smaller probably than the Coracoids. Make careful sketches of the Scapular and pelvic arches when possible. At all events sketch the bones as they lie before removing

them. In case of sternal bones it is important to mark the surface that lies uppermost. Besides the sternal bones there may possibly be Clavicals found near the Coracoids, probably in front.

I want much to know what bones go with each of the three Skulls. Also what teeth go with Skull No.1. Can you send me some from each, that are sure.

I may want the Carnivore sent on soon so keep it together.

Yours try O.C.M.

P.S. Can you work to advantage all winter, if you have a tent etc?

**Marsh tells Felch how to harden the brittle bone.**

Yale College Museum  
New Haven, Conn.

October 16<sup>th</sup>- 1883

M.P. Felch

Dear Sir,

In working out the two skulls, we find the bones very brittle and we have tried various means of rendering them more solid. I think you can profit by our experience, and save many bones that you could not otherwise remove from the rock. We now think Soluble Silica or Soluble Glass as it is often called the best thing, especially if diluted with water so that it will soak quickly into the bones.

You better send to Denver and get a gallon or two of it. A common paintbrush will do to apply it with and several coats should be used on very soft bones. In hot weather very thin glue will be excellent. Gum Arabic when thin is also very good.

All of these substances if they permeate the bones, and get hard will save many very fragile bones of value, especially skulls and feet bones.

Rags help much, and plaster of Paris more on such specimens.

Yours truly

OC Marsh

**Marsh suggests to Felch again that he better mark specimens as to which skeleton they belong to. He also suggests he diagram the quarry as a way to keep things straight.**

Yale College Museum  
New Haven, Conn.

October 16<sup>th</sup> - 1883

M.P. Felch  
Dear Sir,

Since writing yesterday I have looked over Skull No 2, and find that one upper jaw, both lower jaws, and both premaxillaries are missing. From some pieces with the skull I infer that some other missing parts must have been near, and may be with the bones you did not send. You better make up another box (and send by Express.) putting in the remaining skull material (jaws teeth etc.) now on hand. It is important however to label each specimen so that it can be put with its skeleton later.

You might mark on a diagram of the quarry where each was found, naming the distance from skull No1, 2 & 3. put in also any vertebrae or other small bones that you know go with each skull.

I send today some more envelopes. Also Cards to put under the cover of each box. It is always important to label a box inside.

Your bone J+ is a pubis k+ may be an ilium partly weathered out of shape. The vertebra 39 inches long is peculiar if your diagram is correct. I hope you have each of the last two by themselves.

How many boxes have you ready to ship? How much in weight? If you send all together what is the rate of freight to New York

Yours truly  
O.C. Marsh  
(over)

I wish you and Smith to keep at work all winter. Williston tells me that the weather in your part is mild.

**Marsh discusses Allosaurus and what to continue to look for.**

Department of the Interior, United States Geological Survey  
~~Washington~~ New Haven

Oct 24, 1883

M.P.Felch,

Yours of 19<sup>th</sup> inst. just recd. Also diagram of ilium. This is Allosaurus apparently, and I have little doubt that the Skull and neck vertebrae all belong to the same animal. Hence my telegram to send on the whole skeleton by Express.

Your description and sketch of Skull (No4) shows at once that it belongs to a Carnivorous Dinosaur, probably Allosaurus. The small slender scapula found with the neck vertebrae most likely goes with the same skeleton; so you may find the front limbs, and hands very near it. Look out for the hands especially. Also the Sternal bones between or near the Coracoids.

Take up the skull with great care, and spare no pains on packing to make it come safely. We need a Carnivore skull very much, and you may never find another.

You have certainly had good luck to find four (4) Skulls in one small quarry. it is important to get out the skeletons that go with each this fall, as this winter we shall make most of our plates for the Dinosaur Volumns, and the specimens would be worth much more to us now than later.

Please date all diagrams and give position in Quarry. If you cannot get the fore limbs of this Carnivore now, you better send on the skull and the neck vertebrae by Express. Also the sacrum, ilium, pubis and ischia, and one hind leg and foot. I want the whole skeleton, however, here as soon as I can get it.

Dont forget that we are very anxious to get the rest of Skull No1, and No2. We are working on No3 which seems perfect.

Yours very truly  
OC Marsh

**Tells Felch he did well sending skull with enough rock to protect it (Diplodocus).  
Gives him the order in which he wishes the work to proceed in for the rest the year.**

Yale College Museum  
New Haven Conn.

Oct 30<sup>th</sup> 1883

M.P. Felch,

We have nearly finished cutting out Skull No3, and I am well pleased with it. Had you attempted to cut it out of the rock any more that you did, its value would have been greatly lessened. Always remember that we can cut Skulls and feet out of the rock here much better than you can at the Quarry.

No3. appears to be Diplodocus but this is not yet sure. It is very important to know what bones go with this skull. I hope you keep a careful map of the quarry so that we can tell just what bones were nearest, and just how they laid. By knowing this we can perhaps make out the different skeletons. This skull (No3) appears too small for the large Diplodocus hind limb and tail which Williston helped to take up.

About work this fall. I am very desirous of having the bones that go with the (4) four skulls all here before New Years, if they can be got out in good shape. It is very important that we have at least enough to make out the species.

All the four skulls belong to totally different animals. The Carnivore is of course quite by itself, but the other three belong to the Sauropoda, and are on the same plan of structure. The bones that will distinguish them are the vertebrae, sacra, and ischia. The hind feet will probably be very similar.

Were all the four skulls on the same level, or so near as to be practically the same. I judge so from your diagrams.

Yours truly  
O.C.Marsh

P.S. Your of Oct 25<sup>th</sup> with diagram of Skull No4 has just come. It indicates a grand specimen, and I hope it will come out in good shape.

Don't throw away a fragment of this skeleton. If the bones are soft, harden them with gum Arabic, or glue, or close in plaster. Every fragment is important

M

**Marsh suggests a quarry map and diagram system. Getting bogged down in the letters and misplacing some of the diagrams.**

Yale College Museum  
New Haven Conn.

Oct 31 1883

M.P. Felch  
Dear Sir

While we are waiting for skull No4, I have read carefully all your letters in order to get an exact idea of the quarry, and how the skeletons probably lay, with references to the four skulls, and other jaws or teeth. I fear some of your letters have been lost as I cannot make out the position of these skulls from those I have.

In your diagram of the Quarry (dated July 5<sup>th</sup>) I find

- 1) the position of the jaws with slender teeth sent by mail,
- 2) Skull No1. under bone N, in the East end of the quarry.

In one other letter you speak of Skulls 2 and 3 as being 10 feet apart, and in another that Skull No4 is 20 ft East of No2. Please send me a small Map of quarry showing particularly

- 1) the position of the four skulls
- 2) " " " " Allosaurus skeleton
- 3) " " " " big femur 5 ft 10 in long
- 4) position of bones J+ and K+
- 5) " " the vertebra 39 inch long.

I think a good way will be to map the quarry out in sections, something like this.

West End	Central Div.	East End
Section 1	Section 1	Sec. 1
Section 2	" 2	" 2
" 3	" 3	" 3
" 4	" 4	" 4

Or better still number the sections from the South, then you can add to them as you go into the bank northward.

In this way you can locate the specimens easily. Otherwise it will be difficult to do it here.

Transcribed at the Garden Park Paleontology Society's Dinosaur Depot Museum, Cañon City, Colorado.  
Original material housed at the Marriott Library, Special Collections Division; University of Utah, Salt Lake City

Every specimen is now becoming important, and the great thing is to get the skeletons together. Help us all you can, now, or later it cant be done, except proximately.

Yours truly  
OCMarsh

P.S. I hope your men do not tell outsiders about the skulls etc.

**The crates have arrived and Marsh opens the crate with the carnivore first. It has been damaged and Felch is told to leave on more rock and use more packing.**

Department of the Interior, United States Geological Survey,  
Washington

Nov 6<sup>th</sup> 1883

M.P. Felch  
Dear Sir.

The 5 boxes came in today, but I have only unpacked Box No4 with the Carnivore Skull. This is a very valuable specimen, but badly shattered. It would have been better to have taken the entire box for the skull alone, and used 20 lbs more cotton and one or two more sacks around each piece. Perhaps this would not have saved it.

If you find another skull please don't put a chisel or any cutting tool nearer to it than three inches, if you can help it. The more rock around the skull the better, and I rather have 100 lbs extra rock come around a skull than to have a tool within two inches of any part of it. Of course I know that you cant always tell a skull when you first hit it, but as soon as you do make out its nature, Keep it as solid as possible. Skull No3. is coming out superbly because it is in the rock. We have all sorts of fine tools here for cutting away even the hardest rock, without jarring the specimen materially, and if even a fine crack often we fill it with gum or glue, and wait till it is hard.

The Carnivore Skull (N04), is one of the most interesting specimens I have seen from the West. We are now trying to harden it with gum and glue, and in a few days I shall myself go to work on it. It seems to have been complete, and I am in hopes it will give a good drawing, both side and front.

I am glad you are going for the skull of the Allosaurus. Both that and Skull No4. are typical Carnivores, perhaps the same species. This we can tell later, when we can compare the parts of each.

Will write again soon.

Yours with many thanks,  
OCMarsh

Please send list of contents of each box by mail in future. We often want to unpack one box before another.

**Marsh refers to unpacking more of the boxes and finding a lot of shipping damage and tool marks. Suggests Mudge and Williston want to “investigate” too much in the field and have taught him wrong. Leave more rock...**

Yale College Museum  
New Haven Conn.

Nov 10<sup>th</sup> 1883

Dear Mr Felch,

I have as yet had time to look over only part of the 5 boxes sent, and find in them bones of much interest.

I can now only say a word or two about these specimens. M+ came in such very bad condition that nothing can be made of it I fear, but I will examine it again when some of the pieces are put together.

Most of the Carnivore bones (Allosaurus) came in fair condition. The Sacrum was very badly broken up. It would have been better to have left more rock on it. If 20 lbs more rock had been left on the side cut out it would have been worth twice as much tons. It was a grand specimen, and we shall do our best to restore it, but if we had had the block of stone containing it here we could have cut it out so as to show all its features.

I mention this, not to find fault, but for your future instruction. You are having grand luck and I want to make the most of it. A skull, sacrum or foot, will bear transportation much better when packed in its own natural rock, than in any other way. It is of course a great temptation to cut out the rock so as to show the entire form of any specimen, but if done with coarse tools out of doors it is very dangerous. Mudge and Williston both wanted to investigate a little too much in the quarry, and this has perhaps given you a wrong idea of the advisability of cutting away the rock around specimens, especially important ones, such as you are finding now, which may not turn up again for years.

You better keep Tyler through the rest of this month, and longer if you find good bones, and the weather allows you to take them out.

I wish very much you could see just what we do with the bones when they arrive here. Then you would understand fully what we need. Perhaps I can arrange later for you to visit us.

Skull No3 improves by each days work. We have made now cut away nearly all the rock around it. We want especially to know about the vertebrae and limbs that belong with it.

Yours very truly  
OCMarsh

**Marsh sends monthly payment.**

Yale College Museum  
New Haven Conn.

Nov 11<sup>th</sup> 1883

Dear Mr. Felch,

Enclosed please find check for \$215. as per account sent.

I shall be very busy this week as the Nat. Acad. of Sciences meets here, and I have to  
preside.

Hoping to hear more good news from you soon

I remain yours truly  
O.C.Marsh

**Marsh has Felch pursue getting the quarry land filed for him.**

Department of the Interior, United States Geological Survey  
~~Washington~~ New Haven

Nov 22 1883

Dear Mr. Felch,

I enclose a note from one of my assistants here who will come out to Colorado in the spring. He would like to have you file on the quarry land in his name, and you better do it at once, if it can be done.

Yours truly  
O.C.Marsh

Yale College Museum New Haven Conn.

Nov. 22<sup>nd</sup> 1883

Mr. M.P.Felch,\_  
(Canyon City-Colorado)

Dear Sir\_

Please to file, in my name, upon the land in Garden Park which includes the quarry you are now working. I shall be out later and settle upon land

Yours truly  
E.H. Barbour

**Marsh speculating on various bones he has received and asks for what may be found to go with them. Mentions the filing and why it is important.**

Department of the Interior, United States Geological Survey  
~~Washington~~ New Haven

Nov 23, 1883

Dear Mr. Felch,

Yours of the 18<sup>th</sup> inst. is at hand. The humerus you sketch appears to be Stegosaurus. It is too large for No4. if the latter is an Allosaurus of average size. In all Carnivores (Dinosaurs) the fore limbs are very small.

The two limbs of Allosarus you sent with the sacrum are both hind limbs. The portion sent on first by mail was part of the fibula. The only thing yet recd here belonging to the fore limb is the flat claw found separately. Brown sent me a sketch last summer, I believe of the same bone.

I want the fore limbs very much of an Allosaurus. Also the sternum, if any.

I cannot find the Calcaneum with either of the hind feet you sent. Could this have been left in the rock? It is small and might easily be overlooked. The best foot has a place for it, but vacant.

I sent you last evening Barbour's request to file on that land for him. This would make it quite safe. I will inquire further about the law, but it will not do to take any chance of losing the quarry, as I may want to work it for years. I will of course pay all charges of filing etc.

You have not yet told me how many boxes you have ready to ship.

Yours truly  
OCMarsh

**Felch has injured his knee but continues to work on diagrams and the claim.**

Yale College Museum  
New Haven Conn.

Nov 28<sup>th</sup> 1883

Dear Mr. Felch

Your diagrams and letter came today. I am very sorry indeed that you have injured your knee. You cannot be too careful with it till you fully recover. Take no chances about it.

The diagrams are just what I wanted. They made all clear at once.

Your placer claim will answer if you can hold it. I sent Mr. Barbours letter to make sure, but I would prefer that you should secure the claim yourself.

Yours truly  
O.C.Marsh

P.S. Keep Tyler and Smith as long as you think best.

**Marsh sends more instructions on what and how to ship. Felch getting ready to visit New Haven.**

Department of the Interior, United States Geological Survey  
Washington

Dec 7<sup>th</sup>, 1883

Dear Mr. Felch,

Yours with section of Quarry came today.

The specimen with several caudal vertebrae in block with Skull No4. is very important. Please keep it as nearly as nearly as possible as it is, and send it with next lot. Don't cut too near the chevrons or spines as these are the interesting portions.

You better send on everything, but if a bone is all in powder, so that we cannot possibly get it together, you make keep it back, but don't throw it away.

It is very important to have drawings (natural size exactly) made of all bones before taking up. Then if they go to pieces we have the data of restoring the limb approximately which is better than nothing.

I think you better ship all of the bones one month before you start yourself. Then you will be here when they arrive, and can see how they come out.

Any important specimens better be repacked, if you are in doubt about their coming safely. If you can send all in the first lot, send those that belong together.

Yours truly  
O.C.Marsh

**Marsh wants missing parts of Skull.**

Department of the Interior, United States Geological Survey  
~~Washington~~ New Haven

Dec 12 1883

Dear Mr. Felch,

I find that the back part of both lower jaws of Skull No2. and the three bones of the skull that join on to them (viz quadrate, quadratojugal and pterygoids) are missing. They probably all were torn off of the head together, and may have been scattered not far from where the skull lay.

I hope you saved all bones large and small that you found in that region, as without these missing parts we cannot make a restoration of the skull. Some fragments of importance that were broken off from the jaws sent have not yet turned up. Have you any more pieces small or large?

Skull 3 we shall soon figure. It came out well.

Yours truly  
OCMarsh

**Marsh is disappointed that Felch cannot come after all.**

Department of the Interior, United States Geological Survey  
~~Washington~~ New Haven,

Dec 14<sup>th</sup>, 1883

Dear Mr. Felch,

Yours of the 9<sup>th</sup> inst. is at hand.

I am very sorry you cannot come on here this winter. I wanted to give you a pleasant and profitable vacation.

I hope you can continue work with all three men till the end of the month, so as to fill out the quarter. Even if you can only clear up things for next spring, or use the men to help you get the fossils to the Depot in good shape after careful packing I rather fill out the quarter.

I wish to keep out as many small bills as possible, as there is always trouble about getting vouchers for separate items. Unless I have duplicate bills for purchases etc. I cannot get them paid readily, if at all, and it makes accounts complicated.

You may consider that you are in my employ during the winter months. I expect you to see that no one disturbs the quarry, and if you can do any work in fine weather, prospecting, or collecting, etc. you may do so.

Yours truly  
O.C.Marsh

**Marsh writes on a variety of matters with the usual admonishment at the end to  
“Say nothing outside about discoveries.”**

Yale College Museum  
New Haven Conn.

Dec 18<sup>th</sup> 1883

M.P. Felch Esq  
Dear Sir,

Enclosed please find check for \$287.65 as per account sent. I have been away or should have written sooner.

I hope you have that other Allosaurus skull, as we need it very much. Skull 4 is very badly broken. Skull 3 grows better and better. Now our figures of it are made. It appears to be Diplodocus.

The freight charges to NY are satisfactory. The main thing is to have all important specimens so packed that they cannot be seriously injured by even rough handling.

You may send 500 lbs more by Express if you have any more skulls or jaws, fore feet of Allosaurus, or other very important fossils.

After I have published figures of Skull 3 etc, I shall prepare an article on the Skull and skeleton of Allosaurus, and shall then need all the material of that femur I can get.

I will send vouchers soon for end of quarter. Bills for purchaces have to be sent in duplicate, or I cannot get them allowed.

Yours truly  
O.C. Marsh

P.S. Tell Tyler and Smith that you will want them when you begin work again. Say nothing outside about discoveries.

**Marsh tending to financial details.**

Department of the Interior, United States Geological Survey  
~~Washington~~-New Haven

Dec 19<sup>th</sup> 1883

Dear Mr Felch,

I enclose duplicate vouchers for quarter ending Dec 31. I have made them at \$200, per month.

If this does not fully cover the amount, I will send another for Jules to sign to cover his wages

Yours truly  
OCMarsh

**Marsh continues to ask for more of the Allosaurus.**

Department of the Interior, United States Geological Survey,  
~~Washington~~ New Haven

Dec 20<sup>th</sup> 1883

Dear Mr. Felch,

Among the things we want soon are the Cervical vertebrae of Allosaurus and the fore limbs. If you have more of the vertebrae back of Skull no4, you better send them by Express in the next box. Also anything that will tend to complete the skeleton.

I shall take up the Carnivores as soon as I finish Diplodocus (Skull No3.)

Yours truly  
OCMarsh

Please send measurements of skeleton with Skull No 4. as it lay.