Swift water boating..'dished a boatload of freight.'
Big Bend to Revelstroke.

portaging or lining .. Surprise, Kinbasket or Death Rapids or dozen other runs on the Big Bend.

ource of the Columbia above "indermere

Glacial fields in the Selkirks above "indermere and olumbia Lake from which spring the main feeders of the upper river.

The Hudson's bay and Northwest voyageurs ran only the lower 75 miles of the Big Bend and avoided its worst water, Surprise Rapids and the 21 miles of cascades below Kinbasket Lake.

Ross Cox, alexander Ross and Franchiere.

F.P. Armstrong and J.P. Forde, district engineer of the dept of public works of Nelson, British Columbia, started at the foot of the Lower arrow Lake in a Peterboro canoe and made the run to Pasco just above the mouth of the Snake in 10 days.

(Mr. forde's report to Canadian government on roposal to open the Columbia to through navigation to the Pacific ocean.)

Below the Canadian border there is hardly 10 miles of river without a farm, village or even a town of fair size.

Sockdolager of a whirthpool..

One is usually told that the scarce of the Columbia is in anal lats, 150 miles above Golden and immediately south of a wonderfully ovely mountainabegirt lake that bears the same mame as theriver. This is true in a sense bet strictly sepeaking the real source os the river, the one rising at the point the reatest dis ance from its mouth would be the longest of many mountain creeks which converge upon Columbia Lake from the encompassing amphitheatre of the Kokies and Selkirks. This is probably Dutch creek which rises in the perpetuals now of the Selkirks and sends down a roaring grey-green glacier water torrent into the western

side of the Columbia lake. Scarcely less distant from the mouth of the Columbia are the heads of Toby and Hose Thief creek, both of which bring splendid volumes of water 00 to the mother river just below Lake "indermere.

teamers ...

It is a dozen years or more since one could travel the hundred miles or \$60000 the Columbia between Golden and Lake "indermere by steamer." The comparatively sparse population in this rich but thinly settled region was not sufficient to support both railand river transport and with the coming of the former the latter could not long be maintained. wo or three to ting hulks on the mud by the old landing at Golden are all that remain of one of the most picturesque steamer services ever run, for those old stern-wheelers used to flounder up the Columbia to Windermere on through Mud and Columbia Lakes to anal Flats through a log-built lock to the Kootenay watershed and down the winding canyons and tumbling rapids of that tempestucus stream to Jennings, Montana. Those were the bonanza days of the upper columbia and Kootenay--such days as they have e600 never seen since nore will ever see again. I was to bear much of them later from aptain Armstrong when he voyaged a stretch of the lower river together.

Priest "apids reported the fast st on the whole river) Priest Rapids in Canada

Downie Creek, .. the center of a a great gold rush half a century ago.. in Kevelstroke country.

Ferries:

Bossburg ferryman there.

Kettle Falls. .. There is a drop of 12 feet in about 1200 yards in Grand Rapids with nothing approaching a channel among the huge black basaltic rocks that have been scatter d about thorough them z as from a big pepper shaker. As far as I could learn there is no report of any kind of a man propelled craft of whatever size ever having run through and survived

but a small stern-weeker, the Shoshone, was run down several years ago at high water. Shre reached thefoot, a great deal of a hulk but still right side up. This is rated as one of the maddest things ever done with a steamer on the Columbia and thefact that it did not end in complete disaster is reckoned by old river men as having been due in about equal parts to inflexible nerve of her skpper andthe intervention of a special providence that makes a special point of watching over mortals who do things like that. I met Captain McDermind a fortnight later at Potaris, he told me then whathe hadn't heard before that hehad taken his wife and children with him.

.. Ferry

We finished an easy day by tying up at 4 o'clock where the road to the Colville "eservation comes down to the boulder bordered bank at Hunter's fermy.

••as most of the worst water on the American course of the Columbia o cours in the two hundred and thirty miles between the head of pokane Rapids and the foot of Priest Rapids (not to be confused by the rapids of the same name we had run on the Big Bend in anada.)

when I asked the ferry-man at Gerome if Ike Emerson had been seen...

.. The place was marked Creston on the maps but appeared to be spoken of locally as Halberson's ferry. We spent the night with the hospitable Halb rsons, who ran the ferry across the to the Colville Reservation side and operated a small sawmill when logs were available...

erry.. At ox canyon

Ferry--at Plum

At Clark's Ferry (in the Hell Gate country)

Steamer. apt. McDermid .. at Bridgeport.

The Bridgeport, ,, in all the thousand miles of the Columbia prtween

the Dalles and its source, she had been the last steamer to maintain a regular service. This was not reckoning the Arrow Lakes of course.

But the close of the presene apple season had marked the end. Between the increasing ci petiton of railways and trucks the game was no longer worth the candle. He and his partners in the Bridgeport had decided to try and take her to portland and offer her for sale.

...There were locks at the Cascades and the Dalles but Rock Island, Cabinet, Priest and Umatilla to say nothing of a n mber of lesser rapids would have to be run. It was a go big gamble, insurance of course being out of the question on any terms.

The Douglas, half the size of the Bridgeport had tried it acouple of months ago am wellwe would see the consequences on the rocks below Cabinet Kapids.

..I had been a good deal concerned about the sinister cascade of Rock island to say nothing of the long series of rifles called Prie t
Rapids which had even a worst record.

...Ferry

We landed half a mile below the mouth of the Chelan River where the remains of a roadled down through the bouc ers to the tower of an abandoned ferry.

(ante-bellum custom)

Rock Island rapid, are in a gorge within a gorge Ferry..

Columbia R, ver station., above abinet Rapids.

Cabinet "apids is the beginning of a somewhat irregular series of Columnar basaltic fliffs which wall in the Columbia closely for the next 30 miles. The rage in color from a rich blend of saffroncinnamon through all the slades of brown to a dull black..in height from 1500 to 3,000 feet.

ferry.

At the suggestion of the ferry-man at Trinidad we avoided the upper

half of Gualquil rapids.

Ferry.

The cliffs ran outnot long after we left Vantage Ferry and as we neared the Chtago, Milwaukee and St Paul Bridge at Beverly rough patches of sandy desert began opening up on either side.

Seprived of the shelterof the high river walls we were at once exposed to a heavy easterly wind that had evidently been blowing all day on the desert. The sun dulled to a luminous blur behind the pall of eand-filled air and the wind which haded us every now and then about neutralized the impulse of the accelerating current..

There was a 49 mile an hour sandstorm blowin when we beahed the boad under the railroad bridge. The brilliantly golden yellow cars of the CM and St Paul limited rumbling across above behind their electric locomotive seemed strangely out of place.

The one sidewalk of the town s fragment of street was ankle deep in sand as we buffetted outway to the hotel.

...and below Prie t Rapids there would be nothing worth filming until the mouth of the Snake was passed.

.. By this time I had fairly complete data on Priest Rapids.

These beginning at the end of a stretch of slack water several miles below beverly continue for eleven miles. I this istance there are seven major riffles with considerable intervals of fairly quiet water. It seemed probable that all of these with the exception of the second and seventh and possibly the sixth could be run. The lining of the others would not be difficult.

All that morning I inhaled sand as went over Beverly with a fine toothedcomb in an earnest effort to find some one willing to give me a hundthrough Priest Rapids....he offered to haul the boat to the foot of the rapids by the road for twenty dollars but as the down-river branch of the Milwaukee presented an opportunity to accomplish the same end in

less time and discomfort I decided to portage by the latter.

As there was an auto stage service from Hanford to Pasco Roos accompanied me to the former point by train.

Hanford was not the point on the line closest to the foot of Priest Rapids but I took the beat through to there because the station was nearer the river than at Thite Duffs and launching therefore a siple matter.

The stretch of seventy miles between the foot of Priest Rapids and the mouth of the Snake has the slowest current of any point of the olumbia above the Dalles.;...

For a dozen miles below Hanford the river flanked on either side by rolling desert sand dunes winds in broad shallow reaches through a region desolate in the extreme. The only signs of life I saw for many miles were coyotes slinking through the hungry sage-brush and occasional flocks of geese, the latter forerunners of the countless myriads that were to eep me company below the "nake.

At Richfield (c opy) the results of irrigation became evident in young apple orchards and greenfields of alfalfa and these multiplied all the way down to Pasco. The country seemed flat and monotonous after somany weeks among cliffs and mountains and there wood was no question of its richnessand productivity once water was brought to it.

Ferry..

Adter pulling for an hour with the long Northern Pacific bridge in view I landed just below the Pasco-Kennewick ferry.

leaving Hanford... I had beaten him to Paco. After the speech with which we had moved on the pper river, however, now mine had been rather a slow run. I spite of my steady pulling it had taken me under six hours to do the thirty six miles.

Ferry..

I passed the mouth of the snake about three miles below the ferry.

Homley Rapids, seven miles below Pasco ferry, are formed by a rough reef of bedrock running half way across the river from the right bank.

Approached from the right side of the long gravel island that divides the riverjust above them, one might bet badly tangled up beforehe go t through; by the left hand channel the going is easy if one keeps an eye on the shallowing water of the bars.

A sky-line of brown mountains with a double turreted butte as their mossiconspicious feature marks the point were the Columbia finally turns west for its final assualt on the Cascades and its plunge to the Facific. That bend is the boundary of the fertile plains extending from the Yakima to the Walla Walla and the beginning of anew series of gorves in som respects the grandes t of all.

A low sandy beach just abo e the mouth of the rather insignificant Walla comes pretty near to being the most historically important point on the olumbia. HereLewis and Clark first came to the waters of the long-struggled -toward Oregon; here came Fremont, the Pathfinder; here Thompson planted his pious proclamation claiming all of the valley of the Volumbia for the Northwest company and by here, so oner or later, passed and repassed practically every one of the trappers, missionaries, settlers and other pioneers who were finally to bring Oregon permanently under the Stars and Stripes.

The double-topped butte, an outstanding landmark for voyageurs for a hundred years has long been called "The Two 'irgins."

There were a number of big black rocks where the river began its bend to the west, but the channel to the right was not hard to follow.

Neither was Bull Run Rapids a few miles farther down... I followed the steamer cao channel as having the swifest current...

Unatilla. From the head of the first riffle of Umatilla apids to the head of the third or main one is a m le and a half.

Freeman, Lewis R. Down the Columbia. odd, Mead and Co. 1921.