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### ONE MAN'S OPINION

Two and a half months ago, the writer turned out a story entitled "Rover, Move Over", written in slightly facetious vein, but nevertheless accurate and serious in its coverage of the material on which it was based. It covered the miners' attitude and included some of their criticisms of Federal agencies. The story was reprinted in the Mining Journal. We stated then that the story was that of the miners, not ours, and we promised our own story as a sequel, when we felt the urge. This, then is our story, not that of the miners.

In the last month we have noted a distinct lessening of criticism by the miners of the efforts of the Federal agencies to increase mineral production, and to effect operating control regulations, in this emergency. This seems to be due to a combination of causes, among which are:

1. A better understanding of the mining priorities set-up by the operators.
2. Smoother working of the priorities arrangement itself.
3. Easing of specifications and somewhat higher prices by Metals Reserve in the cases of some of the more strategic ores.
4. Better weather conditions and less time for "fireside" or "curbstone" mining by operators.
5. More government engineers on the job to service mining and production problems.
6. A more sympathetic attitude of both mine operators and Washington officials due, doubtless, to realization that we are all in a real, sea-going war that won't stop tomorrow, and that requires our best efforts.

Let us first look into the basic causes of the miners' criticisms reported in "Rover, Move Over."

In truth, if you subdue or deny to the Yankee, his privilege of frank, free, and bold discussion of his affairs and ideas, you efface an influence that probably, more than anything else, has been responsible for the development of the country we have built up. In a dictator country, the antithesis of this condition of affairs exists. Such freedom of expression is likely to result in the offender being "liquidated."

However, through the years, it has become the habit of many Yankees - perhaps we should say 'most' Yankees - to take advantage of their rights to vent their spleens; it has, unfortunately, become the great Yankee pastime to criticize, - especially to criticize Washington. It is well known that criticism or approval voiced by the people at large, has tremendous effect on the actions of the Congress, and presumably, but to a lesser extent, on other Washington institutions or agencies. The mere voicing of criticism then, in a democratic country, may have a constructive effect. If so, it is justified. It is at least reasonable to expect that the institutions or leaders criticized should give some consideration to the criticism, in proportion to the spirit, sincerity, and accuracy employed by the critics.

In the case of the miners' criticism this spring, much of it was true, much of it was blindly directed; some of it was based on unsound reasoning, and some on lack of facts. To the miners' credit let it be said that they, possibly even earlier than some of the highest non-technical lay officials of the government, foresaw the necessity of prompt attention to the domestic production of certain strategic mineral materials in order to prevent bottlenecks in the turning out of finished products for war use. On the other hand, the miners have been guilty of much intolerance of the efforts of Washington officials.

This intolerance could have been lessened somewhat, and the entire psychology of raw material production improved, by more frankness and a slightly different attitude on the part of the Washington agencies. In the present instance, the entire situation was not improved by the critical and unsympathetic attitude of some non-technically informed feature writers and commentators. The criticism by technical and industrial journals is commonly of constructive nature and therefore likely to be justified.

There is another underlying cause for recent general criticism by U. S. citizens. It is basic; witness criticism of Churchill's conduct of government. A few months ago - January, February, March - we Yankees were in an unprecedented state of mind. We had suffered a military invasion - had been caught asleep at Pearl Harbor. Partly from deeply injured pride, and partly from anger at the fluke or bit of military inefficiency that let the enemy best us, we were in a defiant mood. The U. S. couldn't seem to get started. Things were going badly in the far east. The losses of Singapore, Burma and Manila came in succession. As individuals we seemed helpless, our efforts ineffective. We were in a why-the-hell-doesn't-somebody-do-something state. Washington, caught off balance, was not organizing quickly enough to suit the people. Information issuing from Washington was often contradictory or too meager. The net reaction on the part of the citizens was to cause them to bluff and bluster, to criticize, to lay the blame for lack of results at someone's door. Washington got it. As a matter of fact, Washington had some of it coming, but that is quite beside the point.

In any event, we have two points that deserve comment: a lack of tolerance on the part of the miners, and a certain lack of frankness, ready cooperation and warmth of attitude toward individuals on the part of some of the administrative agencies. There is no point in rehashing here some of the errors that developed in the judgment used in the early, more chaotic, period of the war effort. The production effort as a whole seems to have been as good as, or even better than, could have been expected within the elapsed time.

The larger mining corporations, judging by criticisms that came to us from some of the leaders, were intolerant because the government agencies could not get action along some lines as promptly as could a private group. That criticism, although quite true as to facts, was, in our opinion, largely unwarranted. Government regulations consist in large part, as mentioned in our first article, of a set of checks and balances for which all of us are responsible. They were set up to provide an orderly and businesslike manner of doing things, and it just isn't in the cards that, in a democracy - even in a war emergency - the system can be tossed out overnight and a new one installed so that we can get optimum results without delays. Although we think a pretty fair job has been done, we would never ask anyone to cease appealing for better results, nor shall we stop snapping at the laggards. Whoever saw achievement equal expectation, anyway, under conditions such as we have now? Let's give the devil his due.

The intolerance of small miners was less soundly based than that of the large corporations. Let us look into this a bit. Take the case of copper, for example. Between 80% and 90% of the copper produced in the United States is turned out by five or six corporations - from 15 mines. These groups had large mines, large reduction plants, large operation personnels, and presumably substantial ore reserves. When it became plain that there would be a shortage of copper the obvious and simplest and quickest and cheapest thing for the War Production Board to do was to start scrutinizing these few very large operations with an eye to upping the copper production. This was done. Quotas were worked out and arrangements presumably made that gave W.P.B. a pretty accurate line on the amount of additional copper that could be depended upon. Another way - a harder, longer, more costly and much less definite way as to possible results, would have been for the W.P.B. to hire dozens of engineers at the outset, to survey every copper prospect in the U. S., spend many millions of dollars exploring, re-opening and developing old mines and new

prospects. That is the way the owner or promoter of a small mine or prospect wanted it, and this kind of reasoning produced a lot of criticism of government agencies. Originally this criticism was largely unwarranted. It now appears, due in part to sinkings in the Gulf of ships bearing copper from the west coast of South America, that a much wider hunt for copper must be made and that a double-barreled program should have been initiated in the beginning; but this does not demonstrate the shrewdness of the little fellows' criticism in the beginning.

The largest percentage of miners' criticisms that came to us was on the part of the smaller operators. That is mainly because the smaller fellows are much more numerous. Some of the most caustic and pointed criticism came from a few of the larger operators. There was a time when, it seemed, everybody was criticizing Washington.

It should be borne in mind that the perspectives of the two mining groups, large and small, are in the main, vastly different. The large mining corporations are in business on a permanent basis; they are part of the going economy of the nation; their plans must be based on many years operations; they must make profits through the years for they have a number of critical stockholders to satisfy; they have problems of operation, taxation, and labor that are extremely complex; regulations and trends such as import duties, metallurgy, and regional power developments affect large operators critically. Small operators, although no less a part of the national economy, have a quite different set of problems. They are on a less permanent basis; they have few or no stockholders to satisfy; their planning is likely to be short range - they are often 'in and outers'; their problems of taxation and labor have been in the past less severe. Their problems are mainly those of financing, marketing, price and transportation. Usually they have not the wherewithal to help themselves. They can't keep representatives in Washington to look after their interests as the large operators can, so they 'take whatever is dished out' and they feel that the dish is pretty well licked clean before it gets to them. They feel that Washington agencies discriminate against them in favor of the larger operators. That is a principal cause for their criticism.

The truth is that members of the War Production Board, for example, are charged with the duty of bringing about the ultimate maximum production, and they, of necessity, must rate the importance of operations to the war effort in some manner or proportion to the amount each operator produces. That doesn't mean that the W.P.B. considers a 1000-ton mill ten times as important as a 100-ton mill, and defers on priorities and otherwise on a 10:1 ratio in favor of the larger operation. If such were the case the little fellows all over the country wouldn't get a look-in. As a matter of fact, the latter do indeed. However, the W.P.B. and other Washington agencies have the difficult duty of keeping the entire war effort as nearly in balance as possible. It would be difficult enough if W.P.B. merely had the abstract mathematical relations of production, supply and probable demand to deal with; but with the added complications of the politicians, pressure groups, labor trends, the effect of week-to-week changes in commodity imports due to war conditions, and to other variables, the job of the W.P.B. and other Washington agencies becomes tremendously more complex and difficult than most mine operators, large and small, ever stop to realize. And, after all, the people that run the show in Washington are human. By that same token it may be presumed that they are subject to influence. It is our opinion that in the earlier days of the war agencies, when conditions were somewhat chaotic, the war effort may have suffered at times from influence brought by selfish interests. We believe that these effects have now been reduced to a minimum.

Let us mention briefly the case of criticisms of the priorities set-up. While it is true that many mining operations have been hampered at times, some quite seriously, it is probably also true that the mining priorities division activities have been more efficiently

handled than those of any other agency having so involved a set of duties. We know of no other agency that, in order to expedite action, handled so much of its work by telegraph. That helped greatly. More criticisms on priorities came to us than of any other government activity, and most of these came from the smaller operators. That was natural because priorities affected every mining operator in the land, and the largest number by far are small operators. Priority difficulties, relatively, are less serious to the large corporations than to the small operator, but the latter's complaint is just as loud. Although his contribution of tonnage in the war effort may be minute in comparison, he has according to our experience, received practically the same attention as the larger operators. The small sand and gravel operator probably has not fared quite as well as the large, but this is a fault of general conditions rather than of the acts or omissions of the priorities division.

In the last few months we have noted a gradual change in attitude on the part of Washington agencies, such as W.P.B., R.F.C., Metals Reserve, etc. toward mineral raw material producers and it is all for the good. In February the attitude of a goodly number in Washington seemed to be akin to "Treat 'em rough, and tell 'em nothing". That, to the credit of the parties in question, has changed very measurably. Their manner of dealing with mine operators is now more sympathetic. We don't know that any more information is dispensed than before, and that is a point that could well be improved. Washington agencies probably could, without giving out military information, be more frank on matters of production with mine operators. So frequently we have heard such complaints as "If they'd just tell us what the hell they want, how much, and how badly it is needed, we'd tear our shirt to get it." There is a latent production angle that "the powers" have as yet not taken full advantage of. It is patriotism. There really is such a thing as a man or group going out and, from starkly honest, patriotic motives, spending hard-earned money to produce ore. It may not be any more real, but it is more apparent in the smaller operators and individuals. To get the most from this production angle requires frankness and rather direct methods.

In the case of hardrock chromite and manganese production, some months ago the powers in Washington were taking small cognizance of the multitude of small operators and prospectors who then composed the potential producers of these ores. As a result of lack of marketing facilities, low price, difficult transportation, difficult financing, reluctance to making mine development loans, and the fact that the little fellow in mining seemed to have been left out of the picture in the government strategic minerals scheme, there developed in spite of the miners' innate patriotism, not only a low morale but a certain antagonism toward Washington. It began to be a bit alarming in the light of the production job that needed to be done in the war emergency. The mood started with frustration and wound up with contempt. The feeling spread somewhat to western mine operators in general. Criticisms from every hamlet poured into offices of the state and government, and were also heaped on the legislators. The situation was not healthy. Washington was indeed in the dog house. Then Metals Reserve and RFC and WPB began taking various measures such as raising prices, giving attention to access roads, lowering ore specifications, improving marketing facilities, establishing retail ore stockpiles, and providing more engineers to service mining and priority problems. As stated at the first of this paper, the clamor and criticism have lessened markedly in the last month, doubtlessly due in part to the measures named above. There is still need of improvement on the part of the government agencies, but the latter need no longer be so much on the defensive; the miner is beginning in some cases, to find himself on the defensive. The government almost everywhere has improved conditions for the small miner. In some of the more important producing localities the conditions are almost all the miner can expect under the present state of national economy. It is now beginning to be a question of the miners making good on production and showing good faith.

One weakness remaining in the mineral production program is access roads to isolated mines and undeveloped districts. The mechanics of access road approval is still too slow but the miners are equally at fault. They are failing in a large number of cases to do enough development work to justify the access roads demanded.

Summing up our opinions of the relations between miners in general and the government agencies in Washington.....there has been a mutual distrust and lack of sympathetic understanding of each other's problems. This condition is clearing. Some months ago there was a disposition on the part of the government to use the dollar yard stick in reaching most of its decisions, and to disregard the feelings, morale, and psychology of the mine operators. That has changed to an important extent. Very recently RFC announced its willingness to negotiate promptly small mining loans up to \$5000 for reopening mines and exploring new prospects, and the miner need not sign his life and future away. Already several inquiries have come in from small operators, and they have actually said some kindly words about RFC. Life is beginning to be worth living again.....The small operators have accused the government of 'playing with the big fellows'. True, but from necessity, as we explained in an early paragraph. It's a good thing we have some large operators who are dependable mineral producers in this emergency. The smaller operators collectively can help tremendously, but the big fellows must carry the ball, and Washington must call the signals.....The small operators were yapping for attention, only they had considerable reason to yap. The government heard them and has been catering to their wants. Now it is up to the miners to make good.....Criticism, like ham and eggs, is indigenous among Yankees. When sincere and intended to help bring about a desired result, it may be classified as constructive and therefore generally justified; when its target is concealed, when it merely covers bluff and bluster, or when based on lack of facts, it is unwarranted and often harmful. If we credit, as we probably can, to the criticism and hell raised by the miners, the straightening out or improvement of a number of difficulties, then no one can deny the justification of much of the criticism voiced.

In any event the mineral production program is well under way. Its feet are on the ground, or in the ground, and stock can be taken of progress. There are bright spots and dark spots, but the pattern is reasonably clear. Miners are getting over the bluff, bluster, and criticism stage, and down to the plan, dig, and make good stage. The industries that turn out the planes, tanks, ships, etc. got away to a much faster start. They would. You can hire mechanics, build shops, and turn out machines rapidly, but you can't turn on production of chromite, copper or quicksilver like water from a faucet. Now, with the manufacturing industries going full tilt on a production basis, the problem is raw materials to keep those hungry plants going. To keep the total effort anything like in balance will require the shrewdest kind of planning by the War Production Board and other Federal agencies, and the hardest kind of work by those in the field who do the actual work of turning out the materials needed in vast quantities. The need for critical raw materials has not eased.

Washington took some months to get its feet untangled from its skirts. During that period of the war effort it caught merry hell from John Citizen in general and it had much of it coming, although some of the hell it caught was clearly unfortunate and unjustified. Washington has made a determined and rather effective effort to correct difficulties. Some weaknesses remain, and some criticism will continue, but mineral producers as a whole have largely cooled off, and are now too busy digging out ore to dwell on many of their troubles for which they were inclined to blame Washington. Anyway,..... that's one man's opinion.

Earl K. Nixon

## SNAKE RIVER PASSAGE

"Neither snow, nor rain, nor heat, nor gloom of night stays these couriers from the swift completion of their appointed rounds." This oft-repeated quotation might be supplemented on the pennant of the "Idaho" by the words "and no Snake River rapids will prevent delivery of the U. S. mail by mailman and freighter, Capt. Kyle McGrady". Capt. Kyle in his river boat "Idaho" delivers mail to ranchers and miners on the banks of the Snake River through 50 miles of canyon and innumerable white-water rapids in that inaccessible, little-known region between the mouth of the Grande Ronde and Johnson's Bar, from 40 to 93 miles south of Lewiston, Idaho.

The "Idaho" is 58 feet long, flat-bottomed for shallow drought, and is driven by two independent powerful Diesel engines. There is a small pilot house and the rest of the boat is practically all combination hold and cabin designed to carry a maximum load of freight. And a surprising amount of freight - mainly sacks of wool - it can carry.

Regular mail trips are made each week, leaving Lewiston Friday and returning Saturday. Those are long hard days for Capt. Kyle and his one-man "crew", for navigating the Snake after dark just isn't done, and in order to complete the trip on schedule it is necessary to take advantage of every minute of daylight.

The boat pulls away from its modest dock and warehouse at Lewiston at 6 A.M. sharp and if you want to take the trip, don't get there at 6:01.

Out into the turbid current without any backing or filling throbs the "Idaho", Capt. Kyle at the wheel, and the Snake River trip up to Hells Canyon begins as any other boat trip begins. The river is in something of a hurry to get to the Columbia, but it is an orderly hurry and the "Idaho" pushes along at a regular gait.

The passengers - maybe fifteen or twenty - distribute themselves around as fancy dictates. Three or four maybe are in the pilot house with McGrady; the rest may either sit on a bench in the cabin or drape themselves on the cat walk around the cabin. A favorite place in good weather is on the deck over the cabin where one may recline on a bedroll or sit on the edge with feet hanging over the cat walk.

Your fellow passengers will be mainly ranchers or miners returning to their homes on the up-trip and visiting the city on the down-trip, but, more likely than not there will be a tourist or two, maybe a couple of mining engineers, even perhaps a representative of a national magazine of wide circulation with his photographer and a Forest Service Supervisor. In any event, there will be an interesting group, some of whom will experience your thrills in your first trip into the canyon of the Snake.

The first 40 miles or so will be interesting but relatively tame, for you feel still in civilization. After leaving Lewiston and its sister city, Clarkston, on the Washington side of the river (yes, Lewis and Clark crossed the river here), you'll see some cultivated land but mostly grazing land - no timber - up to and beyond the sleepy little town of Asotin, Washington, eight miles from Lewiston. A few miles beyond Asotin, on the Idaho side, some basalt cliffs show a varied assortment of columnar jointing. Some twisted patterns, roughly spiral-shaped are worth a picture or two.

On 30 miles or so up the river without much change in scenery. There are two or three places where the water is fairly swift, but easily navigated compared to the upper river.

Then you reach little Rogersburg at the mouth of the Grand Ronde River which comes in all the way from the Blue Mountains and Wallowas in Oregon. Here the "Idaho" makes a stop - no piers or floats are necessary; at this, as at all other stops on the upper river she just noses into the bank and holds on.

From Rogersburg you begin the real Snake River canyon trip. Here the mountains close in on the narrowing river. Here also are great beds of limestone on both sides of the river - destined some day probably to be quarried and put to industrial use.

Soon you come to some real rapids and McGrady grips the wheel, turning it quickly so that the bow hits the current at just the right angle. The boat keels over, a big splash of spray comes over the bow, you grab a hand-hold somewhere and brace yourself. The boat slows up, then digs in as the propellers churn, and slowly crawls up the swiftest part. You wonder if there will be swifter rapids above and you hope nothing happens to an engine or a propeller while she's battling up one of these rapids. There are too many rocks a bit too close for comfort.

One rapid follows another in fairly regular but far from monotonous succession. You begin to feel confidence in the "Idaho" and her captain; you don't grip the hand-hold quite as rigidly - "roll with the punch" as it were and grin as the spray hits a fellow passenger.

The sides of the canyon are fairly steep - all rock, no timber. The only exceptions are the occasional gravel bars accumulated along some bends in the present river, and those old flat stream terraces, sometimes several acres in extent, up to thirty or forty feet above present high water mark. These latter terraces represent ancient levels of the river and stand as mute evidence of the history of all such streams which are slowly but constantly wearing their channels downward.

A few of the gravel bars and terraces are being placered by "snipers". The equipment required is simple and everything about their lives is simple. They are not concerned about priorities, governmental regulations, excess profit and income taxes, rent, fuel, gasoline, movies, blackouts, and the various other advantages we enjoy in our so-called civilized communities. These "snipers" have three main concerns, namely, food, clothing and McGrady's boat, and of these, perhaps McGrady's boat is paramount. It is their only connection with the outside world. Just to see it go by is proof that their communication line is intact and that they can go out into the land of Broadways and bright lights any time they choose. A white flag on the bank will bring the "Idaho" to the shore.

Snake River gold has a none too good reputation based on many disappointments and failures. One can pan it from all gravel bars but it is so finely divided that the quantity seen in a gold pan gives a magnified idea of the real weight. Report has it that the snipers on Snake River are doing well when they recover two or three dollars a day. The average is probably much less than that. But theirs is an independent breed, and they possess much that we in the city have exchanged for carbon monoxide, drunk drivers and epidemics. No regimentation for them. And boy, there's some swell fishing and hunting up in that country.

A landing on the Idaho side where a woman comes aboard to confer with McGrady about buying a money order; an old prospector is waiting to mail a mineral sample; he engages the "crew" in earnest conversation about this discovery, as prospectors will; you think of the Ancient Mariner; sample appears to be graphite - probably too much iron.

Time and the "Idaho" wait for no man; the prospector's discourse is cut off; the gang plank is hauled in and McGrady heads up stream.

More rapids; more landings to deliver mail; some passengers get off; nearing mid-day the mouth of Salmon River is passed. It's called "the river of no return". Don't know why, but the appellation is sufficiently descriptive to suggest an Indian legend. At any rate, the Salmon, a very husky member of the Snake family (if you'll overlook the biology of the admittedly poor figure of speech) boils down out of the high mountains of central Idaho in considerable volume.

Well, it's time for coffee and sandwiches. Hope you've brought along sandwiches, for something about the scenery or mental exertion of helping to push the "Idaho" up the rapids gives you a swell (or is it "swollen?") appetite. Besides you had breakfast at 5 A.M. McGrady's "crew" lights the gasoline stove in the cabin and supplies the coffee in a big coffee pot. You stand around waiting for the darned thing to boil. Pretty soon you get a sniff of the coffee; you wish to appear disinterested; didn't Robert Louis Stevenson say

"It is better to anticipate than to arrive"? Let the rest anticipate all they want; you want the coffee. You have your own cup ready and waiting - better be safe and have your own sugar too- finally the coffee is ready- wait your turn-page Emily Post- maybe they'll trample the "crew".

Well, that primal urge to consume all the food and drink in sight seems to have given way to a feeling of well-being and you can again view the river without the distraction of hunger. Say, that coffee was good.

The "Idaho" keeps right on moving up the river - more rapids. The rock walls are getting higher- you guess that they slope up to 1500 or 2000 feet at the apparent summits. Some of the walls are sheer for a few hundred feet; others have a 30 to 40 degree slope. Once in a while a little creek comes rushing in.

Now McGrady eases into Eureka landing just below the mouth of the Imnaha River. A pack train meets the boat for supplies and mail. Three fishermen get on with their outfits, evidently bound for some fishing stream up the river.

Eureka is a ghost-town with only the ghost remaining. The foundations of an old mill can be seen; nothing more. Report has it that a mining company attempted production of copper ore and concentrates in the early part of the present century. A great deal of money was spent - not warranted by ore developed. A steam boat costing \$65,000 was built; wrecked on the first trip.

The Imnaha is at flood stage and muddy - very swift as far up as you can see. Quite a river although not in the same class as the Salmon.

Next stop is Fargo Landing a half mile above the mouth of the Imhaha where some men get off with camp equipment. They will set up camp for the engineers who are to make some mineral investigations.

Out into the current again and a short distance up to Divide Creek on the Idaho side. Fine looking fishing stream; ought to be some real trout in it. Now you approach Zig Zag rapids in an S-curve of the river. Here the "Idaho" labors. You watch a mass of rocks jutting out from the shore on your right. The boat is not moving and seems to be getting pretty close to the rocks. This would be an uncomfortable moment and place for something to happen to the engines or propellor shafts, but there's a little reserve of power left and you see that the boat is now edging forward. That's a relief.

A couple of stops at one of which the fishermen disembark and then Pittsburg Landing, on the Oregon side, where there are many sheep and much bleating. Shearing is in progress and McGrady investigates as to how much wool he will have to load on the return trip.

Well, must hurry along; there are dark clouds gathering and distant rumblings promising a storm. More mail is left at landings and you begin to think of supper and of tying up for the night. But first an important matter must be attended to. The Snake is famous for its sturgeon and McGrady likes to set out sturgeon lines in the evening on the way up. Night is the feeding time for sturgeon, and the lines may be collected on the way down the next morning. The favored place for setting a line is a fairly deep eddy. A small hemp rope is the line and three large hooks, each on a separate piece of line a foot or so long are attached to the main line at intervals of a couple of feet, starting at about that distance from the rock weight. Each hook is baited with a third of an eel. (McGrady carries live eels obtained at Lewiston in an eel box on the stern of the boat.) The boat heads into shore at the selected eddy. The "crew" secures the free end of the rope to an alder or large rock. Then the boat backs away, and at the point where the line is stretched out at right angles to the shore, the rock weight is dropped overboard.

After four lines are set at four different eddys, a place to tie up for the night is chosen and the boat made secure by two wire lines.

By this time it is dark and raining. The all-important matter of supper is the next order of business. The party of nine including captain and "crew" gathers in the cabin and

there's considerable activity. Everyone attempts to help the "crew" in preparing the meal, but in most cases it is mostly moral support implemented by a can-opener. The cabin is rather crowded and there is no space at all for the fastidious. The rain increases and is really coming down now, beating on the metal roof which proves to be less than water tight. At long last things are ready and everyone becomes wholly occupied. It's self-service and plenty of food. What more could you ask if you're hungry - and you are.

Anti-climax - dish washing - some members very busy - like the guy with the group in the restaurant who is check blind; but others haven't equal courage and start in. Light is a bit dim in the cabin, and perhaps some phases of the cleansing operation are a bit "sketchy" according to "white kitchen" standards. Dishes are finally stowed away.

Now beds are laid out on the floor of the cabin and there's very little extra space. It's still pouring outside and you try to get your bed down to avoid the drips from the deck. Such attempts are never entirely successful, but maybe you'll get out of the way of the drop aimed at your eye.

Now everybody quiets down - a few facetious remarks, then intervals of silence - finally all silence - no, not exactly; the "crew" snores. Then crash - something explodes out there on the river. You and the rest sit bolt upright in bed, wide awake. Then somebody says "water spout". This isn't altogether enlightening to you, but seems to be an explanation satisfactory to the others so you lie down again. Then you find out that this means a rock slide in the walls of the canyon caused by excessive rains. Since the "Idaho" is tied up at a terrace you know that "water spouts" can't reach you and you quiet down again. Seems as if sleep has just taken over when, klang! Must be the telephone you think stupidly and then you get a glimmer of intelligence and realize it's an alarm clock - somebody says "three thirty - time to get up" - you mention something about the Inquisition; others groan also. But there's nothing you can do about it. Just about time to get up and eat breakfast so that McGrady can start at daylight.

Everybody gets busy - a little more organization this morning. Beds are rolled up. The "crew" has the coffee already well along; somebody gets some potatoes to frying while the "crew" is hovering over some bacon. A vitamin-minded member passes canned fruit juices around. You don't need it for an appetizer but you don't pass up anything in the food line even if it is only 4 A.M.

McGrady and the "crew" eat with facility, even hurriedly, and immediately cast off. It's daylight now and ten miles more of current to fight in order to reach Johnson's Bar and the end of the line so no time to lose.

Anti-climax again. You can't seem to walk away and leave those dishes, so you sigh and grab a "tattle-tale gray" dish cloth. Lucky you are not handling breakable dishes for the "Idaho" in motion gives an insecure footing. You go through various contortions in trying to maintain balance and dry dishes at the same time.

Out on deck again to see what the canyon has to offer in the way of scenery. It's about the same. There are the same steep rocky walls, a few terraces, the same current with occasional rapids all the way up to Johnson's Bar. The river is noticeably higher, but the "Idaho" has no particular difficulty.

Johnson's Bar is reached - end of the line - nothing there but a mail box on a terrace. Nobody to meet the boat. A few minutes for delivery of mail and then the start of the return trip.

It's something of a relief to be going down stream. There is a pleasurable thrill in running the rapids; also you feel that now, with little strain on the engines, there is small likelihood of any accident to machinery. Going down through the rapids, however, requires fully as much skill, if not as much power, as going up. McGrady's technique inspires confidence even though at times the "Idaho" keels over so that you will get your feet wet if you are standing on the cat walk.

Now for the sturgeon lines. McGrady noses in to the bank where the last line was set the previous night. The "crew" disengages the line and gets on board. The "Idaho" floats away from the shore and the "crew" pulls in the line. Because the sturgeon is a bit on the sluggish side and because of the heavy rock weight, you can't be sure whether or not the "crew" has a fish until either you see said fish in the water or the "crew" pulls the rock weight into view. In this case, a fish about 3 feet long comes into view and is hauled aboard without difficulty. The fish flops about some, but nothing compared to a real active fish like a salmon. The "crew" runs a rope through the sturgeon's gills and places him in the eel box which is much too small for him. One of the other three lines yields a sturgeon - smaller than the first - and that's all for sturgeon fishing.

McGrady makes a landing and takes on 3 sacks of wool. There is nobody around, and no sign of habitation. Ranches must be up in the hills somewhere. A sack of wool sounds as if it would be light and fleecy - fleecy surely, brother, but not light - 350 pounds in a sack made of heavy jute. You don't do much in the way of lifting - you just roll them aboard.

Down to Pittsburg Landing - to take on wool. Seems like a metropolis this morning. There are at least a dozen people including some youngsters; plenty of sheep, dogs, and horses.

Before loading the wool and taking on passengers, McGrady has another job to do which indicates something of the scope of his freighting service. Several men get aboard on the Oregon side and the "Idaho" goes across the river where a man with a rope on a steer is waiting. As soon as McGrady lands the boat, the men get off and promptly "bulldog" the steer, tying his head and feet so that he cannot move. Then, by means of a rope attached to his horns and by ungente (definition: vigorous yanking east or west) steering with his tail, the unhappy steer is pulled up two planks and oriented cross-wise on the deck in front of the pilot house.

Back across the river goes the "Idaho" and several sacks of wool are taken aboard as well as some passengers. Among these are two young ranch girls, fourteen or fifteen years old, who are having a wonderful time.

Four or five miles below Pittsburg Landing, the "Idaho" noses in to the Oregon bank, and the Pittsburg Landing passengers get off. Some men and a pack train are waiting. This is the end of the excursion for the steer also. He is unloaded rather easily by placing him at the side of the deck with his four feet just over the side. While a man standing on shore holds the rope attached to his horns, and another man sits on the steer's head, McGrady carefully loosens the rope so that it can be removed from the steer's feet quickly. At the critical moment, McGrady takes away the ropes, the man at the head end gives a mighty shove, and the man on shore pulls on the rope. The steer convulses himself over the side of the boat and lands on all four feet in the shallow water. He scrambles on to dry land; then stands switching his tail and rolling his eyes as if to ask indignantly, "what's coming off around here?"

One of the young girls mentioned above starts saddling a horse. You remark the efficient way she cinches the saddle - no lost motion - old stuff to her - she's probably been it ever since she was able to boost a saddle on to a horse.

Incidentally you will be struck by the fine-looking saddle horses up in the canyon. Without exception, they all seem well-shaped, spirited and well kept - evidence that the horse is still of first importance for transportation in some sections of our country. The automobile has no place in the Snake River Canyon.

A description of the balance of the trip down the river would be not without incident but in the main repetitious - running Zig Zag Rapids is highly exhilarating. The "Idaho" groans a bit with the strain in her timbers as she changes course here; one side goes down into white water; you hold your breath for a moment as she rights herself and goes plunging along.

More wool - the cabin is full; all the luggage and stuff is now stored on the deck; some sheepherders get on; they are holiday bound for Lewiston. Conversation indicates certain anticipations and you are certain that Robert Louis Stevenson was one hundred percent right. One sheepherder has a bundle of "green" sheep skins - very redolent of - well - sheep. He places them on deck next to some luggage, and thoughtfully mentions to the owner of the luggage that maybe said owner would like to move it a greater distance away from the skins. "Some people don't like the smell", he says.

Rounding a turn in the river, you view perhaps the finest scenic stretch of the river below Hells Canyon. Here the river flows westward. You look down the swiftly moving water for a mile or so. On the Idaho side are steep rock headlands to the waters edge. On the Oregon side is a small terrace backed by mountains with steep, rocky slopes and pinnacled summits. The Imhaha rushes into the Snake beyond a high bluff and high-up along the skyline to the west are massive horizontal basalt flows.

Here on the terrace, Fargo Landing, the engineers get off. A tent with a fly has been set up. Smoke from a camp stove beckons. Perhaps you'll want to stay here until the "Idaho's" next down-trip. There isn't very much new to see on the way down. Besides the number of passengers aboard precludes free and unrestricted selection of desirable deck space. You are continually on the lee side of those "green" sheep skins. Yes, Fargo Landing it is - Adios, McGrady.

Too bad to stop on a sort of sour note? Not so intended. You treasure the small inconveniences as a part of the whole pleasant picture of this unique voyage. In a day you have travelled into one of the most inaccessible regions of the country - a region with all the flavor of the old West - where the few inhabitants rely with assurance for mail and transportation entirely upon weekly trips of Kyle McGrady.

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#### CLEARING HOUSE

No. 67-CH George E. Zweifel & Company, 1123 N. W. Glisan Street, Portland, Oregon, have for sale smelting equipment, including a practically new 250-ton capacity Allis Chalmers blast furnace, together with tools, slag pots, cars, bins, gates, blower, motors, pumps, Fordson locomotive, track, steel tank, et cetera. Largest piece will weigh about 11 tons, complete dismantled and transported by truck

No. 68-CH A. O. Weathermon, Bridgeport, Oregon, has for sale property of Giraffe M. and M. Company, Baker County near Bridgeport, consisting of 55 acres patented placer ground and 8 unpatented lode claims. Several hundred feet of development work done. Values reported to be the same as at the Rainbow Mine. Price, \$10,000.

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#### WAR MINERALS AND METALS

The War Production Board has classified minerals and metals according to their present scarcity, as given below. The present classifications show that conditions in mineral supplies have changed since the original "strategic" and "critical" lists were made. Undoubtedly conditions will continue to change and revised classifications may be issued from time to time.

## GROUP I

Vitally needed for war purposes; not generally available for civilian use.

Alloy Steel	Graphite (Madagascar)
Aluminum	Iridium
Asbestos (long fiber)	Lead
Cadmium	Magnesium
Calcium-silicon	Nickel
Chromium	Sodium nitrate
Cobalt	Tin
Copper	Tungsten
Corundum	Vanadium

## GROUP II

Essential to the war industries, but supply not as critical as Group I.

Antimony	Manganese
Arsenic	Mercury
Barium carbonate	Mica splittings
Beryllium-copper alloys	Molybdenum
Borax	Platinum
Calcium	Quartz crystals
Cryolite	Rhodium
Diamond dies and industrial diamonds	Steel--Carbon and scrap
	Titanium pigment
	Zinc (all grades)

## GROUP III

Available in some quantities for other than strictly war purposes. Use may be restricted, however, by accompanying manufacturing limitations.

## A. Available for Substitutions:

Asbestos (common)	Feldspar
Cement	Gold
Clay	Iridium (plating)
Coal and Coke	Lignite
Slate	Limestone and marble
Sulphur	Silver

## B. Available in varying amounts for substitutions:

Bismuth	Ruthenium
Palladium	Gypsum
	Uranium

## C. Presently available for substitutions in critical civilian industry:

Basic low-carbon steel	Gray cast iron Malleable iron. Bessemer steel
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