

I was born at the beginning of the century in a house my father built on a bluff overlooking Lake Michigan in the village of Winnetka. I remember little of the first few years of my life before I was six. Events of those early years that I do recall are hazy and fragmentary as if seen through fractured glass, <sup>factual</sup> and <sup>emotional</sup> ~~impersonal~~ without involvement: a toy sheep left out in the rain and ruined, a fact without sorrow; or being pulled out from under the upstairs hall sofa where I was hiding from the family doctor but no memory of fear. Nor do I recall any emotion <sup>or pain</sup> during the subsequent examination of my throat before a bright window, ~~without~~ ~~pain~~ and only the most indistinct recollection of the adults involved, my mother or the family <sup>S</sup> physician. One event, however, I can place in time. I was standing by my mother's chair in the living room that we called the library. There were other women there for tea. One of them asked my age and either I or my mother said I was six.

Six was the age when school began. My first school was a one room red house west of the tracks on the south side of North Avenue, the dividing line between the two districts of our village, Winnetka proper to the south and Hubbard Woods where we lived to the north. The school house at that time seemed quite far west of the tracks - The Northwestern Railway on which father commuted every day to Chicago - but when I visited the site many years later it turned out to be, in the perspective of an adult, not far at all. The school house was not equipped with internal plumbing which was provided by two outhouses in the back yard - one for girls and one for boys. A blackboard extended along one side wall of the school room and at the back a raised platform for the teacher's desk and chair was used for recitations. These were terrifying experiences.

We students were required to recite our pieces before the whole school standing beside the teacher on the platform. I remember one notable occasion when a frightened little girl became losing speechless and ~~lost~~ control of her functions wet the floor with a large puddle that flowed under the teacher's chair. The child was excused but except for that the teacher sat impassively only raising her feet to the rungs of her chair away from the flood. It was an awesome sight that made a tremendous impression on me and my male schoolmates.

The educational standards of this school apparently were considered by my parents inadequate for their oldest son so that after a year I was transferred to a private boy's school in the next suburb, pretentiously called The College School. Discipline was strict. Misbehavior, inattention and stupidity were punished by slaps with a ruler or by standing the culprit in a corner with a dunce cap on his head. I was fortunately rescued from this purgatory by an attack of appendicitis which started with a stomach-ache one morning after breakfast. I must have become quite sick because I was put in my mother's bed where I eventually fell asleep to be awakened by the application of an ether cone over my nose and mouth by our kindly old family physician Dr. Hooper who gently urged me to breathe deeply. I was operated on on the kitchen table and awoke in the guest room at night desperately thirsty, from which a night nurse was instructed to relieve - inadequately - by administering small lumps of ice. Following recovery, my parents, having reconsidered my educational future and the relative merits of public versus private instruction, decided in favor of the former and sent me to the larger town school in Winnetka.



A short distance west of the little red school house North Avenue ended at a strip of marsh land that extended north and south for many miles. It was called The Skokie, the indian word for marshland. West of the marsh lay open farming country, cultivated fields and woodlots. Much of this area has since been built over by suburban development. The marsh has been drained and a strip along its western edge converted into a parkway that winds along rolling filled land planted with hawthorn trees and ornamental shrubs. Not until one goes farther west beyond the north-bound interstate highway out of Chicago are farmlands still to be found.

The Skokie was a place of mystery and adventure for me and my friends that we frequently ~~rode out to on our bicycles~~ <sup>rode out to</sup>. We would wade out through the marsh grasses to the cattails in deeper water in search of bird's nests and turtles, frogs and snakes. There were birds aplenty: American bitters, sora rails, redwinged blackbirds and marsh wrens. To find a bittern's nest was always the most exciting of discoveries. The large buff eggs on a mat of reeds from which the parent bird had silently and unseen crept away at our noisy approach was a sight that gave me intense and inexplicable pleasure. We never intended to do harm to any living thing for we had been taught to respect the mystery and variety of life and would leave our discoveries untouched. Nevertheless, our eagerness and curiosity probably did cause some disruption of life in the swamp. My interest in birds developed early and became a passion. As a child I collected bird's eggs but never robbed a nest. I kept track of all the nest I found and after the young had fledged there would sometimes remain an unhatched, <sup>un</sup>infertile egg which was fair to take. My collection was not large but was my most cherished possession,

On the border of The Skokie for a number of years the wild grass was mown by a farmer who stacked it for sale or feed for his cows. This haystack was a wonderful place to play much to the annoyance of the farmer because our games pulled the stack apart and scattered the hay. Since he didn't live nearby he was unable to prevent our innocent depredations until one day we were discovered, reprimanded and driven away.

A wooded knoll within the marsh called Crow Island, mysterious for its isolation in a sea of grass, was a haunt for a band of crows, frequented by occasional owls - anathema to the crows - and a pair of red-shoulder hawks. To enter the dense stand of oak and hickory in summer time from the openness of the marsh was to become enveloped by contrast in stygian gloom where unfocused muted sounds produced an atmosphere in which the prevailing sensation was that of / forbidden sanctuary. <sup>an intruder on a</sup> intruder.

In those days, before I knew anything of the vast world beyond, that strip of marsh was the unexplored and untamed West. Not that I thought of it exactly in those terms, it was nevertheless open space devoid of habitations wherein one could escape for a while the restrictions and tribulations of family and school. I felt free there alone with the marsh birds and the wide-open sky. Later when I was older the great undeveloped West acquired a more generous meaning: an almost unknowable measureless wilderness of infinite variety and beauty. About this time my sister, younger brother and I were taken on a camping trip to the Grand Canyon by our parents. We camped out by a spring about half way to the bottom. Provisions and tents were packed down on mules and we spent several days exploring the accessible benches and hiking down to the river. One day we stayed in camp with the cook while father and mother went on a walk



alone. We discovered a cave in a ledge that we were able to climb into and hidden there found what we thought was some old rope and pieces of candles, all of which we threw down to show father and mother when they returned. Father was horrified and told us that what we had been playing with were pieces of fuse and sticks of dynamite cased there long ago by a prospector who never returned.

Old dynamite has a tendency to become unstable and explode when <sup>roughly</sup> handled <sup>disturbed</sup> which was the reason for his <sup>dismay</sup> alarm.

In 1912 when I was ten years old we were again taken on a camping trip, this time to the Yoho Valley in the Canadian Rockies. Father had camped in the Canadian Rockies before; first as a young man during his college years and later on trips with mother and their close friends. He was an enthusiastic amateur mountain climber of the conservative kind, attempting no difficult first ascents. He did, however, explore some remote <sup>regions</sup> of the Rockies and gave names to several unnamed peaks and lakes, names that were accepted by the Canadian Government. Photography was also a hobby of his for which he used a large Eastman folding Kodak. His pictures taken on these camping trip have been preserved in several large photo albums. My interest in photography, encouraged by my father, began at about this time when I was given a box Brownie, superseded, as my interest in photography continued, by a Kodak.

A few years later - I was in highschool then - we were again taken west; this time first to southern Alaska, returning through British Columbia to Lake Louise and camping in Jasper Park. We went to Alaska by steamer from Seattle through the inner waterway along the Pacific coast to Skagway and by rail to Atlin in Yukon Territory where gold was discovered in 1898. Placer gold was still being recovered in marginal operations from river gravel by hydrolic mining.

It was these trips that planted the seeds of my determination

to go west on my own, to see the west of Lewis and Clark and the Oregon Trail, to see the west that the Forty-Niners had seen, and to learn at first hand something of the appeal and romance of the vast wilderness lands and mountain ranges that lay beyond the plains, and to experience the attraction of this region that exerted such a strong hold on the imagination of Americans. A boyhood friend became an inspiration to make seeing America an adventure. He dropped out of Cornell and took to the road, hitching rides with truckers and riding freight trains west. He joined the hoard of migratory workers that in the twenties followed the labor market from the wheat fields of the Dakotas to the lumber camps in Oregon. He worked on the harvests in the prairie states before the days when manual labor had been completely replaced by the great combines and he got jobs as a swamper in the lumber camps of the northwest. He worked with road crews and on the railroads and he traveled wherever his fancy guided him all over the west. Eventually he completed his education and ultimately settled in Santa Fe as a building contractor. I envied the freedom he had enjoyed and resolved to experience at least a taste of it.

The opportunity to go west came in 1922 at the end of my sophomore year in college when sympathetic parents <sup>contributed to the</sup> helped me purchase of a Model T Ford at a cost of less than three hundred dollars. In this machine my roommate Nathaniel F. and I with a mutual friend John D. planned to spend the summer driving west. We had no definite destination although we hoped to get jobs for a time in one of the national parks. The Ford was a touring car model with a fabric top that could be folded down and <sup>had</sup> removable izinglass side curtains. The engine was started by a crank that projected forward under the radiator, but before cranking the spark was retarded to avoid a kickback that could break your arm. The most modern feature on the car, demountable rims, made changing tires,



a frequent necessity, easier than having to pry them off the wheels in position on the vehicle. It had four doors, front and back seats and running boards that extended between the front and rear fenders. Since Ford touring cars had no trunks the running boards served as a storage place for most of the equipment needed for emergencies that one always carried on long trips. One running board held the spare tire,

A model T Ford was a remarkably simple <sup>mechanism</sup> vehicle. The planetary transmission was operated by three foot pedals, one for low range, one for reverse, and a brake. The pedals tightened bands on drums; there were no gears as in modern automobiles. A hand brake lever was used for parking and emergencies. Another hand lever put the car in motion forward. A bar projecting from the right side of the steering column advanced or retarded the spark; a bar on the left side was the throttle for controlling the supply of gasoline. The gasoline tank was located under the front seat from which fuel flowed by gravity into the carburator. There was no fuel pump. <sup>A consequence</sup> ~~The effect~~ of this system was that on very steep grades gasoline could not flow forward to the engine, <sup>in order</sup> therefore, <sup>the car had to be turned around and backed up</sup> ~~to negotiate steep hills it was necessary to back the car up~~ thus putting the gastank above the level of the engine. Most repairs to a model T engine were simple, <sup>made</sup> ~~to make~~ requiring a minimum of tools and spare parts. A spare distributor cap cost somewhat under \$2.00. Other repairs could be taken care of with a screw driver, monkey wrench, some wire, rubber bands and friction tape. Tires were, however, a more serious problem. All tires in those days required inner tubes and the recommended pressure was 72 pounds. The treads, which were not as tough as on today's tires, were easily punctured by sharp objects such as broken glass; but a troublesome consequence <sup>the</sup> of high pressure was a <sup>of tires</sup> tendency <sup>to</sup> blow out on rocky roads. Tire repair became a frequent necessity for which we kept on hand a supply of inner tube patches and casing boots.

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a tool box, jack and tire tools, a shovel and an ax. On the other side three cans containing spare gasoline, oil and water were mounted in a frame attached to the running board and held in place with straps. The cans were all the same rectangular shape, differing only in width; the gas can painted red held five gallons, the water can was white and held two gallons, and the third for one half gallon of oil was blue. As I remember a space behind the rear seat was where odds and ends were stashed away. We had a tent, sleeping bags, a cook stove and provisions as well as our personal baggage which pretty well filled up the back of the vwhicle.

From Massachusetts I drove home alone day and night, stopping only ~~for~~ to eat and buy gasoline. Somewhere in Indiana, in a state of exhaustion I pulled over to the side of a country road, climbed ~~as~~ <sup>up</sup> a fence into a field, crawled into my sleeping bag and fell promptly asleep. I was awakened at dawn by heavy thumping sounds and strange gruntings. On opening my eyes I ~~saw~~ <sup>saw</sup> the huge shapes of a herd of Poland China hogs that out of curiosity had surrounded me during the night.

The expedition finally got under way from my home in Illinois. We drove north through Wisconsin into <sup>NA?</sup> Minesota and turned west to South Dakota. The roads were all unpaved graded gravel or dirt except for short distances out from the larger towns. The interstate highway system was then only in the early planning stage and the farther west one went the less it existed. Roads followed section lines in a rectangular north-south and east-west grid and would end at a right angle junction so that our route became a series of jogs to the north or south until another western road was encountered. Western Minesota and South Dakota were part of the long-grass prairie, uncultivated and unfensed, green and lush with wild flowers everywhere in June. We pitched our tent one evening in tall grass on beautiful rolling



country and were immediately attacked by swarms of giant voracious mosquitos. Without lingering over supper we sealed ourselves in the tent and before we could sleep had to kill every mosquito inside. Our route took us through the Black Hills of South Dakota which I remember particularly for a vein of rose quartz we discovered in an out-crop by a road cut. From the Black Hills we continued on west into Wyoming. As we approached a town somewhere in eastern Wyoming we picked up a cowboy who was thumbing rides. Recognizing us as eastern tenderfoots he regaled us with stories about rattle snakes and how they would crawl into your sleeping bag at night for warmth. When this happened, he told us, you should get out quickly first because he can't strike inside the bag and then you have<sup>d</sup> him. Our destination now was Yellowstone National Park which we entered from the east. After seeing the sights for a day or two we enquired about getting jobs and were told to apply at park headquarters. There we were signed up and sent to separate locations.

I was assigned to road work on the Cook City road. The Model T was parked in the care of the Park Service. Besides the boss the road crew consisted of four, two brothers about my age, me and an older more worldly boy whose conversation was mostly about whores. The boss was a much older man who probably operated under contract with the Park Service. His wife was the cook and a young son did the chores about camp. We slept in Park Service tents but provided our own bedrolls. Meals were served at a wooden table with attached benches set up under a tarpaulin. The road was being graded by horse drawn scrapers and since I had no experience with horses I was set to work digging out rocks and filling ruts and pot holes. After breakfast I would be driven in the bosses pickup with shovel and pickax to places where the rocks were too large for the scraper, left until lunch time and returned again

One day  
in the afternoon. The boss commended me for my diligence which my  
colleagues took as an indication of treachery; I was betraying them by  
working hard even when the boss was not watching. It was lonely work  
on a road seldom traveled by tourists, but I enjoyed the solitude. A  
herd of buffalo had moved into the valley below our camp causing the  
boss considerable anxiety, not on our account or of the camp, rather for  
the safety of the horses that <sup>might</sup> could stray too close to the herd when  
hobbled at night, and, <sup>being hobbled could not</sup> ~~unable to escape~~ <sup>if</sup> ~~might be~~ charged by a bull.  
A horse can be knocked down by a buffalo and severely injured.

One evening the boss came up to me and asked if I were being treated well. I said I was. Then he told me that his son had told him that the other boys were planning to put cactus in my sleeping bag as a trick <sup>to put me</sup> ~~on~~ the eastern tenderfoot. <sup>in his place</sup> He had intervened and warned them that he would have none of this sort of thing going on in his camp. I never let on that I knew about it. ~~XXXXXXXXXXXXWARNINGXXXXXXXXXX~~  
~~XXXXXXXXXXXXAFTERNOON~~ Thus forewarned I was prepared for a possible confrontation which occurred one afternoon as we were all returning to camp in the pickup, the four of us in back. I got into a scuffle over some trivial disagreement with the older brother who grabbed me by my shirt. In the process he fell over the side of the truck and I came over on top of him. He was very mad ~~XXXXXXXXXXXXXXXXX~~ because he was humiliated by his failure to get the better of me. ~~XXXXXXXXXXXXXXXXX~~  
~~XXXXXXXXXXXXXXXXX~~ At this point the boss intervened, "Boys", he said, "fight it out right now and get it over with". But fortunately neither of us wanted to fight and we climbed back into the truck. Later my opponent admitted he was trying to tear my shirt off. That evening after supper the older boy challenged me to a wrestling match. It was a fortunate choice for me since I knew something about wrestling. I put him down, much to his surprise and I believe the surprise of the boss too. After that I was treated with more respect.



After three weeks on the road gang I decided to see more of the west and asked the boss for my time. He asked me why I was quitting and tried to dissuade me, but I was determined and explained that I wanted to ~~xxxxxxxxxxx~~ go on to the coast. So I returned to headquarters with the next supply truck. When I found Nathaniel he refused to quit; he liked his job and preferred to stay on through the summer. He would return by train. John, however, partly from a sense of obligation but also be a good sport about it elected to go on with me.

We drove west into Montana to Butte and from there followed a route which has become Interstate 90. In the evening about 60 miles from Butte we encountered extensive road repairs where all traffic was diverted through the town of Drummond and since the construction ~~had been~~ was a major operation ~~that was~~ closing the main road and not soon to be completed, the diversion became known throughout the region as the Drummond detour, a bottle neck for all east-west traffic. It was a bonanza, however, for the people of Drummond who provided lodging for travelers like us held up at night with no place to camp. We were taken in by a family in town for bed and breakfast.

From Drummond we drove north to Glacier National Park, entering the park from the west, and spent ~~two~~ days walking across the continental divide <sup>and back</sup> from Lake McDonald ~~and back~~. We slept in a camp site where tents had been pitched for hikers. ~~That~~ first night we were disturbed by an animal making a racket and poking around outside the tent ~~looking for~~ <sup>food</sup> provisions. John thought it was a bear but it turned out to be a racoon. We didn't get back to the ranger station at Lake McDonald the next day until well after sunset. There was a new moon and the forest was so dark that we couldn't see the trail without the flashlight we had forgotten to bring, but we managed to keep from straying off into the woods by

following the gaps between the trees overhead. When finally we got back tired and hungry the ranger took pity on us and let us sleep in a vacant bunk house.

In camp one night in the Cascade Range in Washington I cut my wrist with a hatchet while trimming branches from a spruce sapling for a bow bed. The wound didn't bleed very much so I tied it up and the next day went to a hospital in Tacoma to be sewed up. The surgeon told me I was lucky that I hadn't severed the radial artery, that the blade had struck the end of the radius severing a tendon to my thumb. He sewed the ends together, put my forearm in a cast and sent us on our way advising me to seek medical aid should my arm become painful. The wound healed without complications except that the tendon healed to the bone somewhat limiting the motion of my thumb. After visiting for a day some friends of John's in Tacoma who tried to persuade me to see another doctor, we drove south along the coast of Oregon and northern California to the Golden Gate. In California we chose a primitive road south from Eureka that hugged the coast through primeval redwood forests. The narrow dirt track barely wide enough in places for one vehicle wound between the trunks of the big trees in a sinuous course that led from high ocean vistas, across damp fern-shrouded ravines and back again into the dark depths of the virgin forest. The way was seldom traveled but would some day become the coastal route after the trees were all cut down.

We crossed the Golden Gate - the suspension bridge had not yet been built - from Marin County to San Francisco on a ferry and without spending any time in the city headed east to the Sierra Nevadas and Yosemite National Park. From there we took the road over Tioga Pass into Nevada. We were following the Lincoln Highway that had been staked out across the most uninhabited parts of the country with red,



white and blue posts. In places the highway was essentially nonexistent. One of these we came upon in Nevada was a dry lake bed which stretched out for miles before us, a flat and featureless plain of pale hard clay, to a distant low horizon. The tracks that had entered this lake bed faded and dispersed as we advanced onto it. There were no markers, no Lincoln Highway posts to follow, no need to steer the car. So we pulled down the hand throttle on the steering post and both of us climbed out onto the engine hood and sat on the radiator with our legs hanging down in front, assigning all responsibility to the mechanical whims of the automobile in a carefree exhilarating spirit of utter freedom. The car continued on at its top speed of 45 miles per hour in a more or less straight line towards the far shore, which loomed <sup>ing</sup> ever higher as we approached until, <sup>when were to it</sup> ~~as~~ we closed in, it revealed its barren desert scribble character. We found no exit, no car tracks, no Lincoln Highway posts until we had followed the lake bank for some distance south. At the first sign of civilization we came to, a trading post and gasoline pump, we filled up with gasoline at the then unheard of price of 75¢ a gallon. <sup>From then on</sup> Until we reached Salt Lake City on a Sunday the trip was uneventful. It changed then abruptly as we were driving down the wide main street in the center of the city when a plain clothes detective displaying his badge jumped on the running board and ordered us to pull over. He asked us where we were from and where we were going and ~~for~~ our drivers licences and then directed us to the police station. In the police station we were questioned again and John when asked his age replied with considerable asperity, "The same as it was ten minutes ago". We were suspected of having stolen the car because it carried Massachusetts plates and we couldn't produce a bill of sale. To that we replied with irritation that in Massachusetts one is not required to carry the bill of sale for his car (around with him)

him, that we did have the registration certificate for the car, and furthermore that reciprocity agreements between states covering motor vehicle regulations assured motorists of reasonable and courteous treatment. The officer realizing the ridiculousness of his suspicion that we were automobile thieves, but to save his face by referring to higher authority ordered us to drive him out to the home of the chief of police. <sup>where</sup> We found ~~xxxxxx~~ him <sup>back</sup> in his yard repairing fishing tackle. After listening to our protestations against the harassment we had been subjected to and lecturing us on the duties of his officers he dismissed the case against us. The officer then rather sheepishly asked us to drive him back to the police station.

I remember little about the remainder of the drive back to Chicago except for an encounter with a rattle snake in Nebraska. From Chicago John returned to his home in Connecticut by train. He had had enough of driving, and <sup>I</sup> after a few days alone in the empty Winnetka house - the rest of the family was in Maine - I drove back to Cambridge alone.

The opportunity came two years later after I graduated from Harvard to realize my desire to see the American west as my boyhood friend had done by going on the bum. Father and mother had planned a ~~trip~~ <sup>wanted</sup> tour of England and Norway on which they ~~proposed~~ to take the whole family. I told them I wanted to go west instead but did not say how I planned to do it, knowing that father would very much disapprove on moral ground that to ride freight trains would be cheating the railroads. They tried hard to persuade me to go to Europe, but needless to say without success. I had persuaded a classmate <sup>Francis</sup> Albert B., who became a famous geophysicist, to participate in the adventure. For the journey I had made two waterproof canvass sleeping bags with straps for back packing that held blankets, extra clothing



and ~~xxxxxxxxxx~~ personal effects. With this minimum baggage, a small sum of money each, and a twenty dollar bill for emergencies sewed into the fly of our trousers, we set out from Winnetka after my family had departed for Europe. The first stage of the trip was quite conventional; we paid our fares to Milwaukee on the Chicago and Northwestern. From Milwaukee we went to Oshkosh, but by what <sup>also</sup> means I do not remember although possibly/legitimately by passenger train. Starting in Oshkosh our mode of travel became surreptitious and extalegal. I seem to remember that we inquired at the railroad station about trains for Minniapolis and St. Paul and were told that a local would be coming through in the evening. Our plan was to catch a Great Northern freight west from Minniapolis because ~~thex&reatxNorthern~~ this railroad was reputed to be more lenient towards tramps and migratory workers riding its freights than were the other lines of the northwest, the ~~St~~ Milwaukee and St. Paul or the Northern Pacific. The reason<sup>given</sup>/for the tolerancē being that many of the Great Northern employees belonged to the I.W.W., the union of the migratory workers.

Our train for St. Paul consisted of coaches and a baggage car for express and mail. We waited for it on the dimly lighted side of the tracks opposite the station platform. We did not board a coach but when the conductor gave the engineer the all clear signal who gave a short blast on the whistle and started the locomotive, then we climbed onto the ~~baggagecar~~ front of the baggage car immediately behind the engine's tender. A narrow recessed vestibule outside the locked front door provided a place for two people to stand or sit without being conspicuous. This was the traditional way to hitch a ride on a passenger train and was called riding blind baggage. The train rumbled and clattered through the night puffing smoke and steam. In the early morning the train stopped at a water tower to refill tender's tanks, and the fireman, who had climbed up on top to connect the water spout,

saw us and remarked more to himself than to us, "Well, just see all our passengers". He didn't, however, tell us to get off and soon the train was underway again. The next stop was La Crosse, Wisconsin. By that time we were shivering with cold and to warm up had climbed down on the side away from the station and were warming our hands on the cylinder of the locomotive when a railroad detective discovered us and led us into the station where told we would be put in jail unless we paid our fare. We said we had got on at the last stop back, which we happened to remember and it cost us about a dollar each. The detective then ordered us to ride no more passenger trains but said that we could catch a freight in the yards about a mile down the tracks. There we found a group of switchmen sitting in the sun in front of a freight shed. We told them our story and asked when the next freight train would be coming through. No train would be coming through that day, they said, because it was Sunday, and advised us to pick up a ride on the highway. They were sympathetic about our predicament, commenting that the railroad dick would get hurt if he treated others as he had us.

On the highway we were very lucky. Before we had walked far a ~~XX~~ Pierce Arrow touring car we flagged stopped and the driver asked where we were going. Minneapolis, we said, and we were invited in; he was headed there too. His wife was with <sup>him</sup> in the front seat so we rode in back. During the ride we learned that he was an architect and we told him what we were doing and how we planned to procede west from Minneapolis. He dropped us off at the Great Northern Railway station wishing us good luck.

When one sets out to travel by freight train he does not ordinarily start at the main passenger terminal of a railroad in a major city; he goes to the freight yards where the cars are assembled on the outskirts of the city. What we did, however, was done out of





one hundred cars, usually of many types with box cars predominating but intermixed with gondolas, refrigerators, tank and flat cars and always a cuboose at the end. Freight trains were never hauled straight through but stopped at all the division points along the main line, which were spaced about every 200 miles for a change of crews and engines, and where the grades are steep in the mountains to couple on another locomotive, or even two, one to pull and one to push. At the division points changes were sometimes made in the make-up of the train; a few cars with local freight being dropped off or added. In these days before the advent of the diesel engine one of the special distinctions of the railroads was the sound of their locomotive whistles. The Great Northern engines let out a blast, a half rumbling roar, half vibrating screech, audible for many miles that echoed and reechoed from canyon walls. Every long freight is made up of cars from many lines, The Santa Fe, Union Pacific, Great Northern, Rock Island, New York Central, Pennsylvania, Southern Lines and many others, arranged through reciprocity agreements between the lines to obviate transloading from one line to another.

At the first division point we left the cattle car, found a cafe near the railway station and ate a hearty breakfast that cost twenty five cents. Then we walked out to the end of the yards where all the sidings converge into the main line and waited for our train. At many of these yard ends nondescript bushy thickets border the main line on either side, and sometimes the railroad embankment bridges a stream bed or is penetrated by a wide culvert. Here migratory workers, hobos, tramps and bums hang out while waiting for a freight. Within these thickets one often finds the remains of camp fires, rusty tin cans, battered cooking utensils, and other signs of ~~the~~ occupation. These places are the wobbly jungles named after the International Workers of the World, the I.W.W., a socialist union established under Marxist influence at the turn of the century to overthrow capitalism. Many of the migratory



workers belonged to this union together with the very respectable railroad brotherhood.

It was in one of these wobbly jungles that we first learned about union solidarity. A fellow traveler recognizing that we were not cast from the same mold as the majority of our companions, and perhaps motivated by a compassion to save us from the dire consequences of our innocence, asked if we had red cards. Red cards we learned were certificates of membership in the I.W.W., necessary passports for riding the freights. Without a card one ran the risk of being rolled by a breakman, meaning thrown off the train. We were also informed that at the next division point a delegate of the union would sign us up, which in fact is precisely what took place when our kindly advisor introduced us to a more prosperously dressed older man who sold us our membership cards. The membership card is a small red booklet measuring 2 3/4 by 4 1/2 inches containing the preamble to the constitution of the International Workers of the World which begins: THE WORKING CLASS AND THE EMPLOYING CLASS HAVE NOTHING IN COMMON. On~~t~~<sup>the</sup> next page is written the name of the worker and a code for the member who <sup>inducted</sup> ~~initiated~~ him into the union, followed by date of membership and the industrial department to which the worker is assigned. My card was dated July 1, 1924, my work class agriculture and farming, and my inductor A4/191. The final pages of the booklet were given over to spaces for monthly dues stamps and assessments. I paid dues at 50¢ a month for July, ~~XXX~~ August, and September and ~~X~~ 50¢ for an assessment stamp for imprisoned workers. Membership in the I.W.W. was <sup>A</sup>advantageous, however, only on the northwestern lines where the union was especially strong, and not on the central and southwestern, or eastern lines where it might get you into trouble.

At Cut Bank, a division point on the Milk River, a tributary of the Missouri, we were all driven off the train by an irate, hard~~x~~ nosed yard detective who prevented us from reboarding when the train pulled out.

In steady rain we holed up in the wobbly jungle, taking to our sleeping bags to keep dry. After dark the <sup>officer</sup> ~~XXXXXXXX~~ went off duty and we were able ~~XX~~ then to get on the next freight. We had heard from our traveling companions a rumor that a lumber camp south of Glacier National Park was looking for workers and we decided to try our luck there. So we left the train at Belton west of the Continental Divide and the first thing we did after finding a secluded place on a creek bank was to give ourselves a long overdue bath and wash our clothes. The next day, a Sunday, we found the camp and were immediately <sup>ly</sup> hired. The forman told us he would put us to work right away, to which we agreed, and he set us to digging a garbage pit. After excavating what we <sup>thought</sup> was an enormous hole, we were scornfully told it wasn't nearly big enough and to enlarge it several times.

The camp had only recently opened and was engaged in ~~mill~~ ~~XXXXXXXXXXXX~~ constructing a logging road to reach more valuable timber through low land forested in cedar and worthless trees. Early the next morning we were assigned as swampers (those who clear brush and trim the branches ~~XX~~ from felled trees) to two Swedish lumber jacks. They were cutting down the largest cedars, trees at least three feet in diameter, and ~~swag~~ing them into 16 foot lengths to be used for the construction of a corduroy road. Our job was to split the logs in half. We were provided with axes, wedges, and mauls. Before we could begin the splitting a tangle of brush and branches had to be cleared and even~~t~~ though the logs were rotten in the core and easy to split we were hard pressed to keep <sup>up</sup> ~~up~~ with the tree felling.

The camp <sup>consisted</sup> ~~consisted~~ of a bunk house equipped with steel beds, mattresses and blankets, a cook house with attached eating shed, a commiss<sup>ery</sup> and stalls for horses. As soon as we were installed in the bunk house one of <sup>the</sup> ~~te~~ workers, spotting our packs, advised us <sup>not to</sup> ~~against~~ using our sleeping bags and to stash them under our bunks out of sight



of hiring  
because the union, which had long ~~been~~ opposed to the custom ~~XXXXXX~~  
who could  
workers ~~XXXXXX~~ provide their own blankets - blanket stiffs - as  
discrimination against those who couldn't, and had recently won an  
agreement <sup>from</sup> ~~with~~ the logging camps to provide all bedding. The food  
at the camp was plentiful and very good, a victory also for the union.  
For breakfast, the most important meal, <sup>you could have as much as you could eat.</sup> ~~we~~ had a choice of hot or cold  
cereal, eggs with ham or bacon, fresh bread and butter, hashed potatoes,  
steak and coffee.

After a week or more of splitting cedar for the corduroy road,  
which by then had been laid down for a considerable distance into the  
forest, the next step was to cover the logs with dirt and we were  
given new jobs. I was assigned to handling a <sup>fresnough?</sup> ~~fresnow~~, a scoop  
attached to a U-shaped bridle drawn by a horse for moving dirt and  
gravel. The scoop is controlled with two wooden handles like a wheelbarrow  
by the operator following along behind. To fill the scoop the handles  
are lifted causing <sup>the lip</sup> ~~XX~~ to dig into the ground and when filled are  
lowered. It is then pulled along the ground to the place where the dirt  
is to be delivered and dumped by throwing the handles forward upsetting it.

One of the loggers, a tough character with strikingly mongoloid  
features, a belligerent disposition and a propensity for picking fights  
at the slightest provocation had justifiably acquired the reputation  
of camp bully. And, although he had his coterie of sycophants, he was  
avoided by most of the men because, due to bravado, he was constantly  
challenging them to put on the gloves with him. Blacky, the <sup>nick</sup> ~~name~~ for  
one of the skinnners who ~~XXX~~ owned his team of horses, was a huge man  
~~XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX~~ whose face was mostly concealed beneath  
a full, bushy, black beard. ~~XXXXXXXXXXXXXXX~~ Despite his size, he was a  
man of mild and peaceful disposition, but probably because of it was  
regarded as a threat by the bully to his dominant position and therefore

had to be challenged. Blacky, however, who had no boxing experience or desire to fight refused to be coerced into conflict. Unfairly, many of the men who urged him to act as their surrogate to avenge their humiliation and misjudging his pacific nature, accused him of cowardice. Since no one was willing to take on the belligerent logger my friend came forward and offered to box with him. I did not witness the fight but since it apparently ended in a draw <sup>Francis's</sup> Albert's standing in the camp, and mine by association, was considerably enhanced. People came up to me after the fight to ask in awe where my friend learned to box.

We had been in camp a little more than two weeks, while I was still working behind the scoop, when we got fired. The excuse for letting us go was an accident I had with the scoop, which I was dumping at the edge of the corduroy road as directed. As I tripped it one of the handles caught between two logs and snapped off. By bad luck, the boss happened to be watching. I was sent back to camp for a new handle and that evening we were given out time. We were paid a little over two dollars a day.

The next morning we walked out of camp to Columbia Falls, about 18 miles, where we got a freight on the Great Northern to Spokane, Washington and on to Pasco on the Columbia River. We were thrown off the train at Pasco and warned not to ride any freight out of that city. Pasco had a reputation among hobos as a bad town, so we walked across on a railroad bridge to the west side of the Columbia River and were able to get on a Union Pacific freight to Auburn, south of Seattle. In Auburn we managed at some risk to board a rather fast moving train going south, probably a southern Pacific freight, which we stayed with all the way to Eugene, Oregon where we were again bumped off. It was probably then that we decided we had gone far enough and turned back. We worked our way northeast by rail to The Dalles on the Columbia River, which was free flowing then before Grand Coulee or any other dam had yet been built. While scouting around in the freight yards for a



made-up east bound freight ~~thaxxiseked~~ ready to pull out, we were accosted by a plain clothes policeman and questioned at length, asked our names, where we were from, whether we had been in Portland, and where we were going. When we appeared to be innocent of any criminal act we were informed that the police were looking for two men from Portland wanted for murder. Then we were ordered out of the yards and told not to come back if we knew what was good for us. Night overtook us on the highway and with the chance of hitching a ride remote, we searched for a sheltered place to hit the sack. The road was bordered by chaparal in which we found a small space of clear ground surrounded by bushes large enough for our sleeping bags. The next morning we discovered we had camped in a thicket of poison ivy, but luckily were not affected by it.

~~XXXXXXXXXXXX~~

The rest of the journey is vague and dreamlike in which only a few episodes stand out clearly in retrospect. We ate in railroad cafes and traveled on the Northern Pacific across Idaho, all of Montana and on into the wheatbelt where the harvest was in full progress, for which many of our fellow travelers were headed. Somewhere in Oregon every one on the train, two dozen or more <sup>of us</sup>, were driven off by a breakman with a club. One train we rode in Idaho was made up almost entirely of tank cars. There was no safe place to set, it was night, we were very tired, and to guard against going to sleep and falling off we strapped ourselves to the hand rail on the side of a tank car with our belts. I discovered also that I could stand on the cat walk, squeeze both arms between the hand rail and tank so that it was under my armpits, hang there and sleep.

Coming into Montana one evening on a long freight made up of box and gondola cars it stopped for crew and engine change at the division point near the small town of Paradise northwest of Missoula.

A large number of riders, maybe twenty or more, got off and all of us went into the railroad station cafe for coffee and doughnuts and then returned to the yards to await the train's departure. We hadn't been waiting long before we were rounded up by railroad detectives and herded back to the station because someone had skipped out without paying for his coffee. No one admitted to the crime and we were warned that none of us would be allowed to get back on again unless the culprit confessed or was caught. In the mean time while the police searched the yards we were advised to stay on the platform and were told the train would slow down for us as it came through. It was not long before the detectives returned with a shabby meek man who confessed he had not paid because he ~~he~~ had no money. Someone paid for him and he was let go. He was then bawled out by some of the men for not asking for help, getting them all in trouble and giving migratory workers a bad name. As promised the train did slow down at the station.

I remember little about the rest of the journey except that most of the men left the train in the plains states for the wheat harvest while <sup>Francis</sup> ~~XXXXX~~ and I went on towards Chicago. How we finally got home I ~~XXXXXX~~ recall only that baths and clean clothes were luxuries we had been looking forward to for a long time. Francis went home to Cheve Chase by passenger train and I stayed in Winnetka until my parents returned from Europe. When I told them what I had been doing they were astonished and interested. Father did not reproach me for cheating the railroads.

This adventure ended for fifteen years all further exploration of the west. I had graduated from Harvard with a degree in chemical engineering but my interest had turned away from engineering to the more exciting and stimulating organic and biochemical fields. I entered the Harvard Medical School in the fall where in my second



year I became acquainted with and greatly influenced by Dr. Hans Zinsser who headed the Bacteriology Department. My intention had never been to practice medicine but to use medical education as a step towards a career in biochemical research. After graduation I obtained a position in the Bacteriology Department as a teaching assistant with time for research, which I pursued for several years until I received an appointment as a tutor in Biochemistry at Harvard. During that period until 1939 I was a research assistant to Dr. Wyman. My interest in photography, which I had almost completely set aside during Medical School years, revived after graduation to become an increasingly important avocation. I began to photograph more on weekends and intensively during summer vacations gradually accumulating a large<sup>number</sup>/of prints, which were first seen and criticized by Ansel Adams at a dinner party near Boston and later, after I had been introduced to him by my painter brother<sup>Fairfield?</sup>, by Alfred Stieglitz who <sup>was</sup>criticized ~~them~~ unsparingly but also encouragingly. Once a year thereafter I would go down to New York with a box of photographs to show to Stieglitz, who continued to give me kindly advice until one unforgettable day in October 1938, after twice looking <sup>through</sup> at what I had brought, said, "I want to show these".

My photographs were exhibited by Alfred Stieglitz at his gallery An American Place for three weeks from December 1938 to January 1939. This event changed the course of my life. My research had not been going well; I had made no contributions to Scientific knowledge and my prospects for an academic career were fading. It seemed obvious to me that I was a better photographer than scientist and so I resolved to give up teaching and research for photography and before the end of the academic year in June did not seek reappointment.

Since I had freed myself from institutional connections there was no need to stay in Cambridge, I could live wherever my fancy dictated.

My wife's brother had moved to Santa Fe and suggested we come there. This was the west again, a part of the west I did not know. My wife Aline and I decided to try it. We drove out to Santa Fe in the fall for the winter, but Aline didn't share my enthusiasm for New Mexico so after a year we moved back to my birth place in Illinois. But the southwest had a romantic attraction for me that began with the childhood camping trip to the Grand Canyon. This was a young land of sharp outlines, of denuded and eroded badlands, of tall buttes and deep canyons, of exotic desert plants, of wide skies and bright sun. I returned alone several times to photograph the landscape, the adobe building and churches, and the desert birds.

Then World War II changed everything. We moved back to Cambridge where I had a job at the Radiation Laboratory at M.I.T. helping to develop radar. After the war Aline ~~had~~ became more reconciled to living in the west and in 1946 we moved back permanently to Santa Fe.