In describing the physical features of a country, we have first to consider the skeleton or framework of mountains to which its plains, valleys, and river system are subordinate, and on the direction and elevation of whose parts its climate is in a very large degree dependent.

The skeleton of the United States is represented by two great systems of mountain ranges, or combinations of ranges—one forming the eastern, the other the western, side of the framework by which the central portion of our continent is embraced. These two systems, or combinations of ranges, are the Cordilleras. These systems are of different magnitude and extent.

The Cordilleras are a part of the great system or chain of mountains which borders the Pacific coast of both divisions of the American continent, and forms its dominating and most imposing feature. In South America, however, the chain is not so well defined, but, on the other hand, exceedingly elevated; it is also remarkable in the way in which it hugs the coast, forming a lofty wall, as it were, on the Pacific edge of the continent, and being thus the cause that there are neither harbors nor navigable rivers on that side; and, besides, giving rise to extraordinary peculiarities of climate at its western base. The chain is also remarkable for the grandeur of its volcanic manifestations; its highest points being sublime volcanoes—which, however, are generally losing their power, and approaching the dormant, or even the extinct, condition.

The Andes sink at the Isthmus, and almost disappear, so that a railroad of little less than 48 miles in length, and having an elevation of only 262.4 feet at its summit, under the two oceans. From the Isthmus north, the ranges gain rapidly in elevation, and through Central America and Mexico become more and more complex in character, while the volcanic cones which are sentinels along their crests again increase in altitude, and in the activity of their manifestations. Two of these cones—Popocatepetl and Orizaba—are the culminating points of North America, being the only summits which surpass 17,000 feet in altitude.

From Mexico the system of the Cordilleras enters our territory, still widening and gaining in complexity. Just above the southern border of Arizona, along the parallel of 32°, occurs the greatest depression of the Cordilleras existing anywhere north of southern Mexico; here the continent may be traversed without rising to an elevation of over 4,000 feet. The country along this line is a table-land, with many short and broken ranges of no great altitude built upon it, but deeply excavated by numerous canons, as the narrow valleys of the streams are, in the Cordilleras, universally called, and of which that of the Colorado river may be taken as the type. On this plateau, in latitude 35°, there is a transverse east and west line of volcanoes similar to that which traverses Mexico; these grand volcanic cones, of which San Francisco Mountain is the loftiest and best known, rise to nearly double the altitude of the plateau on which they are built up.

The greatest width of the Cordilleras is along the line passing from the vicinity of San Francisco, by Great Salt Lake, to Fort Laramie, or between latitudes 38° and 42°; here the mass of mountains attains a breadth of fully a thousand miles, and if the Black hills, an outlier of the Rocky Mountains, in latitude 42°, are included—as they may properly be—the total breadth of the complex of ranges will be, in its maximum, over 1,100 miles. The whole area embraced within the mountainous belt which we call the Cordilleras is but very little, if any, short of a million of square miles; hence it may, with propriety, be called the greatest physical feature of our territory.

To roughly indicate the shape of the mass of the Cordilleras, we may consider it as having a lozenge-shaped figure, bounded by two parallel north and south and two north and west trend. South of the Yuintah is a region of tremendous canons, ragged and almost inaccessible where the streams—branches of the Colorado—have worn down their beds in the soft, horizontally-stratified rocks, in the most surprising manner, so that the scene of more or less successful gold-mining.

The Rocky Mountains proper, with their continuations southward in New Mexico, form the north and south trending portions of the eastern rim of the Cordilleras, and in latitude 43°, nearly, the change from a northern to a northwestern direction of the ranges takes place, the Big Horn, Wind River, Bitter Root, and other subordinate ranges of which the chain is here made up, having the same northwesterly trend as the Sierra Nevada.

The lozenge-shaped figure thus indicated, framed in, as it were, by the Cascade range and Sierra Nevada on the west, and the Rocky Mountains on the east, encloses a high plain and watershed, traversed by spurs of the Rocky Mountains, and having an elevation of from 9,000 to 10,000 feet above the sea-level, the highest portion being in latitude 39°; along the northern edge of the South Park, from which there is a gentle decline in both directions. The great fresh-water tertiary plains of southwestern Wyoming belong to the same lofty plateau, and it is over these that the railroad passes, keeping always at an elevation about equal to, or in places even greater than, that of the summit of the Sierra Nevada on the line of the Central Pacific Railroad.

The only well-defined range between the Wasatch and the Rocky Mountains is the Uintah; and this is the only high and well-marked chain in the Cordilleras which has an east and west trend. South of the Uintah is a region of tremendous canons, ragged and almost inaccessible where the streams—branches of the Colorado—have worn down their beds in the soft, horizontally-stratified rocks, in the most surprising manner, so that the region is one which almost entirely forbids all passage through it.

Between the Wasatch and the Sierra Nevada are a great number of nearly parallel ranges, which have a direction a little east of north and west of south, and are generally long, narrow, and precipitous. Three ranges rise from a base of 5,000 feet high, or nearly that, and run obliquely across from the Sierra Nevada to the Humboldt River, which marks the limit of their extension toward the north. Beyond this, we strike the southern edge of the stupendous volcanic plateau which covers so large a portion of eastern Oregon and northeastern California. Rising to a considerable height above this volcanic plateau is the range of the Blue Mountains, which lies to the west of Snake River, in eastern Oregon, and which is perhaps less known than any other chain of mountains within our limits. To the west of Snake River are groups of broken ranges, which have hardly yet received names, and which have been but little explored, although they have been for years the scene of more or less successful gold-mining.

Here it may be remarked, that the central portion of the Cordilleras, or that embraced in the belt of States and Territories lying between, and including, Colorado and California, has become very much better known than the regions to the north and south. With the publication of the work of the various State and United States surveys which have been going on adjacent to the line of the Overland railroad, we shall soon be placed in possession of quite detailed maps of the region in question, while the extreme northern portions of the Cordilleras, within our limits, have, as yet, received but a scanty share of attention.

The height above the sea-level of the various ranges of mountains indicated above
now demands a special notice. The most elevated portion of the ranges is on the highest region of the plateau, or in the belt which stretches from California to Colorado. The highest part of the Sierra Nevada is near the parallel of 36° 30' and the peaks rise to over 14,000 feet, while the passes have an elevation of not far from 12,000. The culminating point of the Sierra, Mount Whitney, falls a little short of 15,200 feet, the latest measurement giving 14,887 feet as its height. From here towards the north the range declines gradually in altitude, and, where the railroad crosses, the pass is only 7,000 feet above the sea. At Lassen's Peak there is a great break in the range, which may, indeed, there be said to begin. Southward from this, the Sierra and the Cascades, unless assume rather the form of a plateau, on which, however, several grand volcanie cones have been built, beginning with Shasta and continuing with Pilot, Hood, Adams, St. Helens, Rainier, and Baker. Of these, Shasta and Rainier are the highest, and of almost exactly the same elevation, if the results of the latest measurement of the latter by the United States Coast Survey be depended on, differing as they do by more than 2,000 feet from the former one by the Wilkes United States exploring expedition.

The highest points in the Rocky Mountains are none of them, so far as known, quite equal in altitude to the highest in the Sierra Nevada; but while there are only a few peaks in the last-named chain which exceed 14,000 feet, there are in the Rocky Mountains a very large number which range between 14,000 and 14,500, their differences of altitude, in fact, falling within the limits of barometric error of measurement, so that a long time must elapse before they can be arranged according to their relative rank. It is, indeed, one of the most curious facts, in connection with the different mountain groups of the Cordilleras of North America, that the zones of elevation of the Sierra Nevada and the Rocky Mountains and the Sierra Nevada is very remarkable. Owing to the great elevation of the central portion of the plateau, the streams rising on the western slope of the ranges which crown the eastern edge of the mass of the Cordilleras have to find their way to the sea by means of long detours to the north and south. The sources of these streams are in the Wind River range, where the range has not only equal, but is higher than the elevations of the Columbia, the Columbia, and the Mississippi.

In the higher portion of the vast triangular area embraced between the two great rivers that drain the western slope of the Rocky Mountains lies the Great Basin, which includes almost all the State of Nevada, as well as the western portions of Utah. Here the amount of the rain-fall is very small, and the evaporation rapid, so that the streams grow less, and degrees, and beautifully less, as they leave the mountains, finally disappearing altogether in the valleys at their base. There are many of these "sinks," as they are called, each the place where the drainage of some particular range or group of ranges disappears. By far the most important of these, however, is the sink of the Carson and Humboldt, the former stream coming down the eastern flank of the Sierra Nevada, the latter preserving its existence for more than 300 miles, and running across the whole of northern Nevada, transverse to the general direction of the ranges in that State, and thus affording the only practicable railroad route from east to west. It also marks, as before suggested, an important change in the geology, since its course is along the southern edge of the great central valley running from the North to the West.

Want of navigability is a characteristic of all the streams which drain the Cordilleras to the west. Instead of the vast streams opened to steam navigation by the Mississippi and all its tributaries, allowing access to points two and three thousand miles away from the mouth of the Mississippi, the Shoshone Falls may be classed with the Niagara, the Zambezi, and the Victoria, which preserve their regularity of form, parallelism, and equality of height over long distances, so that they seem almost like artificial walls, in this respect differing most wonderfully in the form of parallel chains just spoken of predominates, and the other towards the south, after passing the Bay of New York, where it is nearly at the sea-level of the Atlantic Ocean, it gradually loses its altitude and, finally, at a breadth of a number of miles, the mountain range, or its eastern escarpment, in the centre of the system, in gentle stages towards the basins of the Great Lakes and the valley of the Ohio. Thus, in reality, there are two somewhat distinct regions traversed in crossing the chain through its central portion, from east to west; one a zone of parallel ranges and longitudinal valleys, the other a region of plateaus with occasional irregular and quite subordinate chains wrinkling their surface. Therefore, there is lacking in the Appalachians that almost entire uniformity of structure which prevails in the Jura.

Professor Guyot calls attention to a conspicuous feature of the most folded portion of the Appalachians, characterizing the chain through its entire length. This is the existence of a great central valley running through the system from northwest to southeast, which can be traced without difficulty, although not perfectly uniform in its development. It is the Lake Champlain and Hudson River Valley in New York; the Kittatinny Valley of Pennsylvania; the Great Valley of Virginia; and, finally, still further south, the Valley of East Tennessee. The chain, or system of chains, bordering this central depression on the interior, and made up of elevated and continuous plateaus or mountain ridges, is almost lost, except in the eastern escarpment, in the centre of the system, in gentle stages towards the basins of the lakes and the valley of the Ohio. Thus, in reality, there are two somewhat distinct regions traversed in crossing the chain through its central portion, from east to west; one a zone of parallel ranges and longitudinal valleys, the other a region of plateaus with occasional irregular and quite subordinate chains wrinkling their surface. Therefore, there is lacking in the Appalachians that almost entire uniformity of structure which prevails in the Jura.

Professor Guyot calls attention to a conspicuous feature of the most folded portion of the Appalachians, characterizing the chain through its entire length. This is the existence of a great central valley running through the system from northwest to southeast, which can be traced without difficulty, although not perfectly uniform in its development. It is the Lake Champlain and Hudson River Valley in New York; the Kittatinny Valley of Pennsylvania; the Great Valley of Virginia; and, finally, still further south, the Valley of East Tennessee. The chain, or system of chains, bordering this central depression on the interior, and made up of elevated and continuous plateaus or mountain ridges, is almost lost, except in the eastern escarpment, in the centre of the system, in gentle stages towards the basins of the lakes and the valley of the Ohio. Thus, in reality, there are two somewhat distinct regions traversed in crossing the chain through its central portion, from east to west; one a zone of parallel ranges and longitudinal valleys, the other a region of plateaus with occasional irregular and quite subordinate chains wrinkling their surface. Therefore, there is lacking in the Appalachians that almost entire uniformity of structure which prevails in the Jura.

Possessing these features in common, as a whole, the chain of the Appalachians presents three subdivisions, each exhibiting its own well-marked peculiarity of structure. These are the northern, extending from Cape to the Hudson; the middle, from New
York to the Kanawha or New River in Virginia; the southern, from New River to the southwestern extremity of the system. Each of these subdivisions has its peculiar curvura-
ture and general direction. The northern trends to the north from the Hudson River to
the Kanawha, which makes an almost complete cut across the chain, heading in the Blue
Ridge and marking an important change in the character of the topography. This central
division of the Appalachians is about 400 miles in length. It is very narrow towards its
northern end, but widens out in Pennsylvania, decreasing again in Virginia. It is com-
posed of a considerable number of subordinate chains, much curved toward the west, and
remarkable for their regularity, their parallelism, their abrupt declivities, and their moderate
elevation, both relative and absolute; they rarely rise to 2,500 feet above the sea-level.
The subdivisions of this eastern group of the Appalachians are necessarily rather artifi-
cial, for the range and elevation is very irregular in its development. The most continuous
chains of the Mountain Zones may be considered to pass from east to west, the Adiron-
dacks and the Catskill providing the exception. But the Adirondacks, though
situated on the eastern side of the Mohawk and Hudson valleys, which make a marked
break through the sys-
tem, both vertically and longitudinally, forming the great natural highway between the
East and the West, or the Great Lakes and the Atlantic sea-board. This was the first
route across the country which was traversed by canal and railroad. So complete is the
physical break here, that a rise of the ocean of 400 feet only would separate all the extensive
region included between the St. Lawrence, the Atlantic Ocean, and the Hudson and Mohawk
valleys, into a great island entirely detached from the rest of the continent. A rise of
140 feet only would detach all that country which lies east of the Hudson and Lake
Champlain.

Above the Kanawha River, which makes an almost complete cut across the chain, heading
in the Blue Ridge and marking an important change in the character of the topography.
This central division of the Appalachians is about 400 miles in length. It is very narrow
nears the Ohio, and to the Atlantic by the Susquehanna, which breaks across the
western base of the Appalachian system.

West of this division of the Appalachian chain is the great plateau, which occupies all
that part of New York which lies south of the Mohawk, and also the northernwestern part
of Pennsylvania, and reaches an elevation near Lake Erie of 2,000 feet. From this
table-land the drainage descends by the Great Lakes to the St. Lawrence, to the Gulf of
Mexico by the Ohio, and to the Atlantic by the Susquehanna, which breaks through the
whole chain, finding its way in the most unexpected manner through gaps in the different
ranges. The topography of the Appalachian in Pennsylvania has been carefully worked out
by the State Geological Survey, and it is so remarkable in its character that some addi-
tional details may with propriety be given in regard to that portion of the chain.

According to Professor H. D. Rogers, the mountain-zone of Pennsylvania may be
divided into five well-marked parallel belts, which are as follows, when enumerated in order:
1st. The New York Highlands, the other the northeastern termination of the Blue Ridge:
2d. The Great Appalachian Valley; 3d. The Central Appalachian Ridges, or the
New York Highlands; the other the northeastern termination of the Blue Ridge:
4th. The Sub-Alleghany Valley; 5th. The Alleghany Mountain, or the southeast escarpment of the Alleghany Plateau.

The South Mountains have been alluded to as part of the system of ranges
bordering the great central depression of the Appalachians on the east. In Pennsylvania
this belt consists of two quite detached ranges of hills, one of which is the prolongation of
the New York Highlands, the other the southeastern termination of the Blue Ridge:
both these groups of hills have a moderate elevation in Pennsylvania, hardly exceeding 600
or 700 feet.

The Appalachian Valley, or Kittatinny Valley, as it is usually called, stretches across
the State from the Delaware to Maryland, forming a part of the great central valley pro-

duced by excessive erosion of them by water; and the present configuration of the surface is
one which demonstrates that a remarkable, and as yet little understood, series of geological
events has been concerned in its formation. The ridges, which are but remnants of
the eroded strata, are variously arranged in groups with long, narrow crests, some of which
preserve remarkable straightness for great distances, while others bend with a prolonged
and regular sweep. In many instances, two narrow, contiguous, parallel mountain ranges
are found with their crests at nearly the same level, an effect due to the same cause; and in
many other cases, while the crests of two parallel ranges are at the same level, there is a
sweep of the intervening land in a direction of their crests, thus producing two long, parallel
ridges, one of the harder rocks forming the steep, narrow, enclosing mountains; the other having the anti-
clinal form, being valleys scooped longitudinally out of the summits of the arches by an
ever-increasing erosive force of water cutting through the harder upper strata, down
into the softer, lower ones. Both classes, though thus begirt by steep, sharp, and very
strong ridges, are usually entered by more than one notch or gap, affording pass-ways to
The Appalachian chain proper may be thus described, using
the language of Professor H. D. Rogers:—It is a complex chain of long, narrow,
very level mountain ridges, separated by long, narrow, parallel valleys. These ridges
sometimes end abruptly in swelling knobs, and sometimes taper off in long, slender points.
Their slopes are singularly uniform, being in many cases unvaried by ravine or gully for
many miles; in other instances they are trenched at equal intervals with great regularity.
Their crests are, for the most part, sharp, and they preserve an extraordinarily equable ele-
vation, being only here and there interrupted by notches or gaps, which sometimes descend
to the water-level, so as to give passage to the rivers. The whole range is the combined
result of an elevation of the strata in long, slender, parallel ridges, wave-like in form, and of
excessive erosion of them by water; and the present configuration of the surface is one
which demonstrates that a remarkable, and as yet little understood, series of geological
events has been concerned in its formation. The ridges, which are but remnants of
the eroded strata, are variously arranged in groups with long, narrow crests, some of which
preserve remarkable straightness for great distances, while others bend with a prolonged
and regular sweep. In many instances, two narrow, contiguous, parallel mountain ranges
are found with their crests at nearly the same level, an effect due to the same cause; and in
many other cases, while the crests of two parallel ranges are at the same level, there is a
sweep of the intervening land in a direction of their crests, thus producing two long, parallel
ridges, one of the harder rocks forming the steep, narrow, enclosing mountains; the other having the anti-
clinal form, being valleys scooped longitudinally out of the summits of the arches by an
ever-increasing erosive force of water cutting through the harder upper strata, down
into the softer, lower ones. Both classes, though thus begirt by steep, sharp, and very
strong ridges, are usually entered by more than one notch or gap, affording pass-ways to
Two narrow, contiguous, parallel mountain ranges
are found with their crests at nearly the same level, an effect due to the same cause; and in
many other cases, while the crests of two parallel ranges are at the same level, there is a
sweep of the intervening land in a direction of their crests, thus producing two long, parallel
ridges, one of the harder rocks forming the steep, narrow, enclosing mountains; the other having the anti-
clinal form, being valleys scooped longitudinally out of the summits of the arches by an
ever-increasing erosive force of water cutting through the harder upper strata, down
into the softer, lower ones. Both classes, though thus begirt by steep, sharp, and very
strong ridges, are usually entered by more than one notch or gap, affording pass-ways to
Two narrow, contiguous, parallel mountain ranges
are found with their crests at nearly the same level, an effect due to the same cause; and in
many other cases, while the crests of two parallel ranges are at the same level, there is a
sweep of the intervening land in a direction of their crests, thus producing two long, parallel
ridges, one of the harder rocks forming the steep, narrow, enclosing mountains; the other having the anti-
clinal form, being valleys scooped longitudinally out of the summits of the arches by an

The Appalachian chain proper may be thus described, using
the language of Professor H. D. Rogers:—It is a complex chain of long, narrow,
very level mountain ridges, separated by long, narrow, parallel valleys. These ridges
sometimes end abruptly in swelling knobs, and sometimes taper off in long, slender points.

The Appalachian chain proper may be thus described, using
the language of Professor H. D. Rogers:—It is a complex chain of long, narrow,
very level mountain ridges, separated by long, narrow, parallel valleys. These ridges
sometimes end abruptly in swelling knobs, and sometimes taper off in long, slender points.
called, is supposed to be where the Saguenay cuts the chain, and 4,000 feet is given as the approximate elevation, while peaks in the parallel ridges near the St. Lawrence exceed half that height. Among the summits seen with such picturesque effect from Quebec, Mt. St. Anne is the highest, and is given by Hayfield at 2,687 feet.

This range falls off in elevation as we follow it west, and in the country between the Ottawa and Lake Huron the highest summits do not appear to exceed 1,500 to 1,700 feet. The range is made up of rounded hills, densely wooded, almost exclusively with coniferous trees on its higher portions. Its valleys are very wide and full of great ponds and lakes, so that one may traverse almost the whole region with the aid of the birch canoe. As Sir William Logan remarked, in 1863, over a thousand lakes have already been laid down on the maps of the Canadian portion of the Laurentian Mountains, although the region has been as yet only imperfectly explored.

We have thus rapidly sketched the most striking features of the great ranges of mountains which form the frame-work of our territory, and have now to say something of the interior regions thus enclosed. And the most noticeable facts in regard to this vast area are its slight elevation above the sea-level and the general plain-like character of its surface. These conditions are well illustrated by the statement that at Cairo, the junction of the Ohio and the Mississippi, we are 1,100 miles from the mouth of the last-named river, and yet only 222 feet above the sea-level. At Pittsburgh, the head of the Ohio proper, 975 miles farther up, we have attained an elevation of only 699 feet. Going in the opposite direction, or following up the tributaries of the Mississippi and Missouri, which come in from the west, we have a similar condition of things. One may travel up the Platte or Kansas for hundreds of miles, rising so gradually and imperceptibly that the country seems all the time a level plain. From Council Bluffs to the source of Lodge Pole Creek—along the line of the Union Pacific Railroad—the ascent averages only five feet to the mile. From St. Paul, which is 828 feet above the sea only, we travel for 670 miles westerly before the mouth of the Yellowstone is reached, and here we have attained an altitude of only 2,210 feet, with an average rise of only two feet to the mile.

The Great Lakes, those vast expansions of the upper waters of the St. Lawrence, are among the grandest of the geographical features of the North American continent. They are remarkable for their immense area and uniformity of elevation above the sea-level; and the consequent facilities which they afford for commercial intercourse among the States which are near them. Their combined area is equal to a little more than 90,000 square miles, Lake Superior having over 30,000, and Michigan and Huron each over 20,000 square miles of surface. Erie, Huron, and Michigan are nearly on the same level, the extreme difference between the first and last named being only about nineteen feet, while Superior is only twenty-two feet higher than Michigan, or forty-one above Erie. The divide between the Great Lakes and the waters flowing into the Mississippi and its tributaries is also everywhere low, and at the lower end of Lake Michigan it is so trifling that only a small amount of excavation has been required to cause the waters which formerly flowed into that lake to run towards the Gulf of Mexico. Lake Ontario is, indeed, 331 feet lower than Lake Erie, about half the descent from one to the other being made in one single plunge of the vast body of water, forming a cataract which has, in all probability, not more than one rival in the world.

The level and fertile region of the Mississippi Valley is prolonged towards the far southwest, around the Gulf of Mexico, and far into the interior of Texas, where it finally passes into the elevated, barren plateau of the Llano Estacado.

From such facts as those above mentioned it may with propriety be inferred, that there is a great uniformity of character over the vast area enclosed between the Appalachians and the Rocky Mountains; so far as its availability for settlement and cultivation are concerned, the most important differences seem to result from the unequal distribution of rain upon it. Between the Appalachians and the Mississippi, and for some distance west of this river, the annual precipitation is ample: for the purposes of agriculture, and, in consequence, this region is pre-eminently the agricultural portion of our territory; its gently undulating surface is abundantly wooded, and hardly anywhere too rough for cultivation, while a very large portion of it is covered by a soil of unequalled fertility.

But as we leave the Mississippi and the Missouri behind us, traveling westward, we gradually enter a region of diminished rain-fall; the trees decrease in number, and finally become exclusively limited to the banks of the streams, while the general surface of the country is covered by a heavy growth of nutritious grasses; and this continues until the base of the mountains is reached, when moisture from the melting snows on the higher summits is sufficient to nourish and support a forest vegetation. This pastoral, rather than agricultural region of our territory extends from about the 49th meridian west until we have risen so high on the slope of the Cordilleras that the elevated and mountainous character of the country forbids all cultivation.

We have, viewing our territory in the most general way possible, four great divisions of its surface—1st. The eastern sea-board, and the Appalachian ranges which press so closely upon it; this is the commercial and manufacturing region. 2d. The Great Central Valley, pre-eminently the agricultural region. 3d. The pastoral, or the region of the plains. 4th. The mining region, or the Cordilleras.

The nearness to Europe, the abundance of its water-power, the variety and value of its forests, its inexhaustible resources in coal and iron, the excellence of its harbors—these are the conditions which determine the east as the leading commercial and manufacturing region. Wonderful richness of soil, natural facilities for internal commerce, afforded by an unrivaled system of rivers and the ease with which railroads may be constructed, vast deposits of coal and iron ore—these are the gifts of nature to our Central Valley, and such as will enable it, while surpassing the east in agriculture, to vie with it in commerce. The mineral and metallic wealth of the Cordilleras has within the past twenty-five years brought that previously unknown region within the pale of civilization, and it is already brought that previously unknown region within the pale of civilization, and it is already opened to commercial intercourse with the East and the Orient. Portions, indeed, of the extreme western border of our territory are to be classed among the most fertile districts of the country; but this fact would probably have remained long unknown had not the discovery of gold in that region drawn thither a numerous and energetic population. And, as if to render more and more feasible the at first doubtfully mooted project of an overland railway, the existence of rich deposits of silver, in various parts of the Great Basin, became a well-ascertained fact, after the most productive gold-fields had begun to fail off in their yield; and it was thus clearly demonstrated that the natural difficulties of a central route across the Continent must be overcome, however great they might be, in order that the East and the farthest West should come into close connection with each other.