seven years previous to 1876 has netted the Government \$21,000,000, besides paying the interest on the whole amount of bonds.

Again, if it cost the Government, before the completion of the Pacific railroad, according to Mr. Stewart, "over \$8,000,000 per annum, and this cost was constantly increasing" how fast was this increase? Could it be less than six per cent. per annum? Should the figures be made on the basis of six per cent., the Government must have saved, previous to 1876, in the seven years that the line was completed-before the companies were compelled to complete it-over THIRTY MILLIONS OF DOLLARS. This, too, after the Government deducts every dollar of interest on their own bonds issued to the companies to aid the construction of the road.

The above are some few of the advantages of the Pacific railroad to the Government, and, con-

sequently, to the country at large.

The States and Territories on the line of the Union and Central Pacific railroads, or immediately tributary to it, contained a population, in 1860, of only 554,301, with 232 miles of telegraph line and 32 miles of railway. This same cope of country contained a population, according to the census of 1870, of 1,011,971, and was encompassed by over 13,000 miles of telegraph lines and 4,191 miles of railroads, completed, and many more in progress, in which was invested the enormous capital of \$363,750,000. Add to the above the immense amount of capital invested-in quartz mills, smelting furnaces, development of mines, and other resources of the country, within the same ten years-then should we bring all the figures down to the present times, the grand total would be comparatively an astonishing romance.

Where, but a few years ago, the buffalo and other game roamed in countless thousands, and the savages skulked in the canyons, and secret hiding-places, where they could pounce out unawares upon the emigrant; the hardy pioneers who have made the wilderness if not "to blossom like the rose," a safe pathway for the present generation, by laying down their lives in the cause of advancing civilization, now are to be seen hundreds of thousands of hardy emigrants, with their horses, cattle, sheep, and domestic animals; and the savages are among the things that

have "moved on."

Grumblers-The great hue and cry that are made at times by the people and press of the country, in regard to "giving away the lands," "squandering the public domain," etc., which censure the Government for giving, and the railroad company for receiving grants of land in aid of this road, are very surprising in view of the foregoing facts. We would like to know what the lands on the line of these railroads would be worth without the road?

Did the Government ever sell any? Could the Government ever sell them? NEVER. It could not realize as much from a million of acres as it would cost their surveyors and land-agents for cigars while surveying and looking after them. When the Pacific road commenced, there was not a land office in Colorado, Wyoming, Montana, Utah, or Nevada, and only one or two in each of the other States or Territories. On the other hand, by the building of the road, many millions of dollars have already found their way into the Government treasury, and at just double the usual price per acre.. These grumblers would place the Government in the position of the boy who wanted giving it away. O! how generous.

No. 6 Annex. The High School at Omaha—an illustration of which we present on another page, stands on the site of the old State House of Nebraska, and is known as "Capitol Hill." It was completed in 1876, and cost \$280,000. It is 176 feet long and 80 feet wide. The main spire rises 185 feet from the ground.

The building is constructed in the most substantial manner, which, for convenience, beauty in design, and finish throughout, has but few, if

any, superiors in the western country.

This High School has a contemporary, of the same name, in the city of Omaha, if a monthly newspaper-"arepository of refined literature and journal of education"—could be called such.

"The High School" is, as the quotation above indicates, devoted to pure literature and educational purposes, eschewing sensational journalism. Its essays, poems, fashion notes, college, university and high school reports, miscellaneous correspondence, and editorial reviews on all the live questions of the day, make it very desirable as a family journal, and specially interesting to young ladies and gentlemen. Nothing unrefined is ever allowed to appear in its columns. It is printed on fine book paper; price, \$1 a year.

No. 7 Annex. First Steam Train-The illustration given on page 82 was drawn and engraved from the original painting in the possession of the Connecticut Historical Society, and represents an Excursion Train on the Mohawk and Hudson R. R. from Albany to Schenectady, N. Y., in 1831, the First steam train in America. The engine was the "The John Bull," imported from England, as well as the engineer, John Hampton, "expressly for this road at large expense." Her cylinder was 51/2 inches, 16 inch stroke, wheels 41/2 feet. The boilers had thirty copper tubes, five feet long, four inches in diameter. Connecting rods are worked on double cranks on front axle. Weight of engine complete, 4 tons. The tender represents the method of carrying the fuel--wood--in barrels, with a few sticks handy for immediate use. The cars were regular stage bodies set on car wheels. On this grand excursion trial trip were sixteen persons, who were then thought venturesome, many of whom have since filled important positions in the councils of the country. Mr. Sidney Dillon, President of the Union Pacific R. R., it seems, was one of the adventurous few. Here is food for thought and comparison with the improvements of the present day.

No. 8 ANNEX. The Madrone Tree-This peculiar tree can be seen in many parts of California, particularly on excursions, described in Nos. 4 and 5. It sheds its bark in the fall of the year, much the same as other trees their leaves. The tree after shedding its bark, has a bright salmon color, then turns gradually darker, until, at the shedding time the following year, the bark is quite dark.

The Manzanita, which means in Spanish "little apple," a small shrub, also sheds its bark. It is found along the foot-hill ranges of California. The root is very tough, fine grained and polishes very beautifully. Many fine boxes, and handles for canes, umbrellas and parasols are made from

the root of the Manzanita.

No. 9 Annex.—"The Hand-book of Wyoming and Guide to the Black Hills and Big Horn Regions," by Robt. E. Strahorn, Esq., Cheyenne, Wyoming, 1877. This is a most invaluable work, describing a new and intensely interesting region at this time. Mr. Strahorn has traversed to eat his apple, sell it, and then get credit for the country he describes, and in the 270 pages will be found—an unusual thing these days—a vast