

REMINISCENCES OF TRAVEL IN SPAIN.

MADRID—THE ROYAL PALACE—SPANISH MANNERS.

We consider it fortunate in some respects to have visited Spain under the old regime—and before revolution had destroyed many of those ancient landmarks which add so much to the interest of the tourist—for it is notorious that revolutions in Europe have always been attended by the destruction of many rare and beautiful objects of architecture and art, which appeared to symbolize and foster oppression and cruelty.

We spent several days in Madrid and vicinity and wrote a letter for the SCIENTIFIC AMERICAN giving our impressions of that city and of its people, but for some reason the letter never reached its destination.

It was a fat looking package, and we have reasons for thinking that the post officials thought best to see what it contained. If they read it—and we think they did—some of the statements were found not very complimentary to the manners and customs of the Madrilenos. We regretted at the time the loss of that letter which had cost us some thought and labor, but had no intention to reproduce it for publication.

We think, however, in view of the interest which centers in Spanish affairs our readers may be willing to read a few stray notes about Madrid and its surroundings, which we propose to give in two or three papers.

Of the many thousands of our countrymen who make annual visits to Europe, few ever visit Spain.

Tourists usually are content to follow the beaten track of travel through France, Italy, Switzerland, and Germany. They imagine, and not without reason, that Spain is a hard country to travel in—that a trip down among the Spaniards suggests brigandage, treachery, and stiletos, discomfort and hard fare.

The hotels of the larger cities are tolerably good, it is true, but those found in out-of-the-way places are usually wretched abodes, scarcely fit for mules and donkeys, with which agreeable beasts the country is well supplied.

The floors of the houses are usually brick, fuel is scarce, and no comforts are provided against the sharp chill of a winter's night. An English gentleman, who was compelled to stop at a railway junction, informed us that he slept at one of those cheerless *posadas* upon a very tough bed, in a room having a stone floor, without any glass in the windows, and nearly starved at that, which confirms our experience. In regard to the important matter of food, it is not worth while to say much about it—oil and garlic are the staples—and to one not accustomed to these articles, fasting and prayer are excellent substitutes. Yet, in spite of all drawbacks, Spain, in some respects, is the more interesting country.

The scenery, especially in the Northern provinces and sierras, is grand and picturesque in the extreme—often desolate and peculiarly savage.

The inhabitants are also interesting in their rude manners, customs, and superstitions; whilst in the Southern provinces the cities are quaint, and the country, oriental in its character, furnishing an abundant supply of luscious tropical fruits and wines—the latter being usually kept in hog-skins which impart to it a peculiar flavor. There are also many Roman ruins (Spain was once the granary of the Roman Empire); exquisite Moorish structures; grand palaces; extensive monastic buildings, which are now being torn down; and sublime Gothic cathedrals unequalled in Europe, rich in saintly relics, precious stones, gold and silver ornaments, sacerdotal vestments and pictures—indeed the fine arts and literature flourished in the 17th century, when Spain was the proudest kingdom in Europe—but of this we may say more at another time.

It is not easy to conjecture how it happened that Madrid became the capital of Spain, but it is supposed that Charles the Fifth fixed upon it by reason of its central commanding position where he could best overlook and govern his subjects. The city stands upon a series of hills, 2,300 feet above the sea, and within sight of the snowy Guadarama mountains lying on the North. The surrounding country is entirely swept of timber so that by reason of its exposed situation the north winds sweep through it unopposed, and persons have frozen to death in winter.

In summer it is like an oven—the thermometer frequently standing at 105°. These extremes of heat and cold make it an undesirable, and at times, a dangerous place of residence. Yet, in spite of these objections, Madrid is a fine city, numbering upwards of 400,000 inhabitants, abounding in fine public buildings, broad, well-kept, well-built streets, promenades, parks, and drives. It is a modern looking city, and compared to Toledo, Grenada, Cordova, Saragossa, Seville, and Valencia, has little about it of a Spanish character—nothing to remind one of the chivalrous fighting times of Charles the Fifth and Philip the Second; and but for a few lazy Spanish gentlemen, who prefer the cloak to the paletot coat, and the hordes of miserable beggars, one might easily imagine himself in a thriving French city, so thoroughly has Paris fashion possessed itself of the costumes and equipages of the people. The ladies, however, seem to reject the hat, and usually appear on the streets with a graceful lace mantilla thrown over their heads.

In the 10th century Madrid was an outpost of the conquering Arab, and these enterprising Moors built an Alcazar for the Kalif which was destroyed by an earthquake, and the palace built upon its site by Henry the Fourth, with all its marvelous treasures of art, gold, silver, and diamond ornaments were consumed by fire. The present comparatively new palace, constructed of white colmenar stone, and completed in 1764, is undoubtedly one of the finest palatial edifices in Europe. It forms a square of nearly 500 feet, with numerous open courts, gardens, and other appendages of a royal residence, and cost upwards of four million dollars. For some reason the Queen refused to allow strangers to visit the palace, owing, it is said, to the fact that at one time an English party abused the royal hospitality by either helping themselves to some small articles, or mutilating the curtains. The

palace contains among other treasures a great variety of clocks, for which Ferdinand the Seventh and his father had a great passion, though it is said of them that they never knew the right time. Charles the Fifth was also afflicted with the same horological mania, and not succeeding in making any two of his clocks go alike, he wisely concluded that they were like men's heads, always a little out of gear.

The chief open air resort of Madrilenos is the Puerta del Sol (Gate of the Sun), a considerable circular plaza, having a fine fountain in its center. This spot seem to be a central one for everybody in the city, and Spaniards, enveloped within the ample folds of their cloaks, plant themselves upon the sidewalks, where they lazily smoke and talk away valuable time, which wiser men know to improve, and appear not to consider themselves in the way of any one. The Spaniard smokes in the street; he smokes at the table, no matter who dislikes it; he smokes in the omnibus; he smokes in the cars; he smokes to the church door, and lights up as soon as he gets out; and, for aught we know, he smokes in his bed, and seems not to entertain the slightest notion that the fumes are not delicious under all circumstances; and this excessive smoking, no doubt, accounts for the cadaverous appearance of a majority of the Spanish men.

WASHINGTON CORRESPONDENCE.

FEES IN PATENT OFFICE CASES—IMPROVEMENTS GOING ON—EXAMINATION OF EXAMINERS.

Heretofore the Judges of the Supreme Court of this District have been paid a fee of \$25 in each and every case of appeal from the Commissioner of Patents. Hon. Elisha Foote has come to the conclusion that such payments are illegal, and has discontinued the same, so that now and until some legislation is had in the matter by Congress, no fee will be required for an appeal to the Judges of the Supreme Court. The Commissioner takes the ground, that inasmuch as the Act of March 2, 1861, which repeals all former acts fixing the rates of the Patent Office fees, makes no mention of a fee for an appeal to the judges, none is required. If the Commissioner is right in his view of the matter, then the Patent Office has been exacting, and the judges receiving, \$25 for each and every appeal that has come before them for the past seven years, without any authority of law for doing so. The judges, however, we understand, entertain a different opinion in regard to the matter. They contend that the fee paid for an appeal to them, is not a Patent Office fee, but belongs to the judge who hears the appeal; and that consequently, the Act of March 3, 1839, requiring the payment of this fee, was not affected by the Act of March 2, 1861.

Improvements in the Patent Office Building.—The sand stone tiles which have covered the first and second floors of the corridors of the old building fronting on F street, have been removed, and in their place new tiles of marble from the quarry at Lee, Mass., are now being put down, giving a greatly improved appearance to the corridors in this part of the building. In the draftmen's room the old portfolios in which the drawings have been kept since the Patent Office building was first occupied have been thrown aside, and the rooms fitted up with drawers which are hung on slides and trunnions, so that when pulled out to their extent they can be tilted into a conveniently inclined position, to admit of the ready handling and inspection of the drawings. The drawer is covered by a patent, and we understand that the eight hundred and upward which have already been put in, cost upward of twenty thousand dollars. The Agricultural Department, as you are probably aware, has moved out of the Patent Office into a building built expressly for it; and the rooms made vacant by this removal have been fitted up for, and are now occupied by the Examiners in charge of Land Conveyances, Navigation, Fire-arms, Builders' Hardware, and Chemistry.

The Board appointed by Commissioner Foote to ascertain the qualifications of Examiners and their assistants are holding daily sessions of about three hours each in what some one has facetiously named a "sweat box," and they dispose of about two cases a day. The following are some of the questions which were been asked the candidates, viz.: "What's a parallax?" "What's a magnet?" "What's a chemical equivalent?" "What's the difference between plaster of Paris and lime?" etc., etc. Prof. Henry H. Bates, of Hobart College, N.Y., has lately been appointed a second assistant Examiner, and assigned to duty with General Spear in the class of Civil Engineering. Prof. Bates held the adjunct chair of Mathematics in Hobart College, and he passed an unusually creditable examination before the Board of Examiners.

COMMUNE BONUM.

THE ART OF PERFUMERY.—We have received a communication from Septimus Piesse, F.C.S., the well known perfumer of London, and a frequent contributor to the SCIENTIFIC AMERICAN, in which he states that he sent to the publisher at Philadelphia for a copy of the book "Guide for the Perfumer," noticed in the SCIENTIFIC AMERICAN Oct. 7th, and was much chagrined to find that it was almost an entire reprint of his own work, "The Art of Perfumery," and without a single reference either to his name or the source from whence the matter had been taken. Mr. Piesse further states that his work has gone through several editions, and that while people are welcome to the use of his recipes, he considers it unjust to appropriate his labor of twenty years without the honorable mention of his name.

THE METEORS.—Our space will not permit us to publish a large number of communications upon the above subject, of which we are in receipt. They contain few additional facts of interest, and as we are much pressed for space we are sure our esteemed correspondents will excuse us.

THE SOCIAL SCIENCE CONGRESS IN ENGLAND.

Surely there is quite enough of sorrow and suffering in this sinful world to justify any well meant, even though ill devised or misdirected efforts for the eradication of social evils. So important a movement as the recent Social Science Congress, held at Birmingham, England, gave us hopes that in the deliberations of the many learned and thinking men sure to be present at such a meeting, something practical and definite might be evolved that would contrast refreshingly with the vague and unsatisfactory proceedings hitherto characteristic of similar movements. We are however compelled to say that a careful review of the transactions of this congress has resulted in the disappointment of our hopes.

Why is the mockery of applying the name of science to a conglomeration of crude speculative opinions, unsystematized, and without the solid basis of fact persisted in. There was no such thing as social science, in the strict interpretation of the term, apparent in the deliberations of the Congress at Birmingham. Not the slightest reference, so far as we can see, to the natural laws which govern the formation of all society, or even the slightest attempt to show that those laws are violated in its present organization, and if so, how and why.

In the place of such a method, which, if there be a science of sociology is certainly possible, and as the true scientific method, the one of all others to be closely followed we should think in dealing with such a subject, we have discussions upon jurisprudence, free trade, international law, neutrality of the English Government during the late rebellion in the United States, change of nationality, etc., etc.

To sum up the whole matter, the efforts of the Social Science Congress seem to have been principally directed to the display of a class of talent which society could very well dispense with and discussion of topics as foreign as possible to the subject in hand.

The notoriety which is sought by a certain class of aspirants can be gained often by persistent braying, and in our perusal of reports that have reached us in reference to the Birmingham convention, we have been painfully impressed with the belief that those who took part in its proceedings, had the good of society less at heart than the successful display of their own rhetoric. Be this as it may, we are more than ever impressed with the belief that such meetings will never result in any permanent, or even temporary, alleviation of the current evils of modern society.

Wood Gas.

Some years since we noticed at length the manufacture of illuminating gas from wood. Some of the processes which were economical before the war were found impracticable for a while. Latterly the subject appears to have acquired renewed interest.

A correspondent writes us that the cities of Wilmington, N. C., Macon and Columbus, Ga., and Montgomery, Ala., are all lighted with wood gas. Another correspondent gives the following facts about the products of the distillation of wood:

"The article in your journal of 18th Nov., 1868, on the subject of wood gas directs attention to an important and thoroughly practicable source of cheap and good gas for illuminating purposes. All varieties of wood, when subjected to distillation in close retorts, yield gaseous and liquid products, and leave a residue of charcoal in the retort. The respective quantities of these products and their quality depend chiefly on the kind of wood used, on the degree of heat to which it is subjected, and the mode in which the heat is applied.

"High temperatures produce a larger proportion of gas than low, but the yield of the liquid products is thereby diminished. These liquid products contain several substances of considerable commercial value, the most important being acetic acid, tar, and wood spirit or naphtha. When properly purified and diluted with water the acetic acid yields a perfectly transparent white vinegar, which cannot be distinguished from the best French white wine vinegar, or the best English malt vinegar, and infinitely superior to any cider vinegar. The tar is of equal quality to North Carolina tar and may be used for the same purposes. The naphtha or wood spirit is an excellent and cheap substitute for alcohol; for such purposes as burning in lamps, manufacturing varnishes, for dissolving gums and the aniline colors, and for the manufacture of chloroform. Its value for these purposes is well known in Europe, and it is there extensively used. The charcoal may be used for all the purposes to which that substance is usually applied. The gas is easily purified, and may, by suitable means, be obtained of high illuminating power. Its perfect freedom from sulphur is an important advantage it possesses over coal gas.

"Hard woods such as oak, beech, and birch, are the most suitable. Good oak treated at a moderate temperature yields as follows from one cord. The money values attached are very low, very much below their real or selling prices:

5,000 feet illuminating gas at \$2 per 1,000 feet.	\$10 00.
50 bushels charcoal at 10 cents.	5 00.
2 barrels tar at \$1.	2 00.
5 gallons naphtha at \$1.	5 00.
100 gallons vinegar at 25 cents.	25 00.
1 cord of oak yields.	\$47 00.

"By a higher temperature more gas may be obtained with a corresponding reduction in the yield of liquid products. The manufacturing expenses are moderate and the necessary apparatus not very costly. In many parts of the country where wood is cheap and coal dear this manufacture could be advantageously substituted for that of coal gas."

THE TELESCOPE.—Professor Alexander, of New Jersey College, Princeton, delivers the second lecture of the American Institute course on Friday evening, December 4, at Steinway Hall. Subject—The Telescope and its Revelations.