have seen Ehrlenberg's. He is to make me one in the fall. These balances will turn with a milligram when loaded with 50 grams in each scale. They are therefore abundantly sufficient for all the purposes of chemistry. Hirschmann constructs chiefly optical apparatus and will fit any the compound microscope which I showed you at home in New York with 3 aplanatic lenses which will make it as complete & as any instrument of the kind in America — for 12 thalers or about 9 dollars. These are the microscope which Ehrenberg uses. The whole instrument as he makes it costs 50 thalers or about 36 dollars. They are not externally so handsome as Oberhäuser's however. I have not yet been introduced to Ehrenberg and do not yet of course know what instrument he considers most perfect. Next Spring I hope to take lessons from him in the use of the microscope. In the winter I shall probably hear Weiß on Crystallography & Mineralogy and Dove on Physics as I wish to see the best apparatus and to get acquainted with their mode of lecturing and teaching in this country — It is not worth while to attend any lectures on Chemistry regularly. I shall hear each Professor once or twice however. You will naturally suppose that being here in January, at the very centre of circulation of philosophy & science I should know much more about what is going on in the world than you yourself do at home. Now the fact, this is very far from being the case and so far at least as science is concerned I actually know less of what is going on within a thousand miles around me than I did when in New York. There are many reasons for this. In the first place there are no reading rooms whatever where as with us all the more important foreign and domestic journals may be found. 2d. The German newspapers are the most wretched affairs which can be conceived of and are made up of little scraps of local intelligence from different cities which are copied from one paper to another [illegible] political dissension being of course forbidden. Since I have been here I have not seen either the Philosophical Magazine, [illegible] though I can see I'll send off. Annalen from time to time, yet my chief source of information is the Athenaeum which is taken at some of the Conditoreis or Confectioneis Shops though the arrivals are very far between. These Conditoreis supply the place of reading rooms to a certain extent. The German papers and one or two French, English & Polish papers are to be found in them usually a little antiquated. What has struck me more than anything else since I have been here is the utter absence of every thing like activity in practical & business matters and the clumsy & imperfect manner in which such things are done. The Germans are 50 years behind us in everything which relates to the outward & material concerns of life. They have not, in this city at least, the remotest idea of comfort in their domestic arrangements. People of all ranks live huddled together in one house with a filthy courtyard in the centre & stagnant puddle before the door. They have a horror of fresh air and if I go out in the morning I find everything closed up tight when I return. The beds are too short for persons of reasonable dimensions, like myself for instance, & instead of bedclothes you are provided with a sort of mat which commonly extends from the lower border of the bed to the middle of the back so that if you lie straight you find yourself divided into 3 distinct strata of temperature viz 2 frigid and one intermediate torrid. The cookery is for the most part detestable, reduced the vegetables being scarce and the meat cooked to an incipient pap. Notwithstanding all this however and his peculiar habits of life, which are at least as frugal as Light Horse & Blue eyes and I have seen very little of the healthy ruddy look which I saw in Hamburg. The Berliners are wealthy rather short and slight and there are as it strikes me many deformed persons in proportion to the whole population. The women are proverbially ugly, & I have not seen 3 tolerably pretty faces since I have been here, nevertheless there is often a redeeming something about their countenances which prevents them from being absolutely hideous. I have been surprised to find at the character of the books which are most read here. For instance Cooper's Novels and Irving's Works are as it is [illegible] popular as in London. All descriptions of Scenery and life especially in foreign countries are read with the greatest avidity, while philosophizing and moralizing works find very little favour. They seem to be fond of the actual & practical just as in proportion as they themselves are deficient in every thing that is practical. In regard to scientific books I should have met with a great number of which I knew to nothing before I came. A new edition of Berzelius is just appearing in Leipzig. 2 volumes and the greater part of the third are completed. It is very elaborate and contains an immense mass of matter. I take the Leipzig as they appear. Liebig's & Wöhler's Handwörterbuch der Chemie goes on very slowly. The second volume is not yet finished though the work was begun 4 years ago. A new treatise on Chemical technology is just appearing, it is by Karsten of Berlin and is very valuable and interesting. Liebig's Physiological works are much less highly thought of here than among us & in England and several of the most eminent physiologists in Germany have made violent onslaughts upon him. He has managed to