Diseases of stonemasons

The illnesses that afflict stonemasons, sculptors, quarrymen and other trades of the same nature also should not be overlooked. When they work underground quarrying marble from the rock, while they are cutting and carving it to make statues and the like, they often breathe in the hard, sharp, and jagged splinters that fly off while they are working. This is why they are often afflicted by coughs and some of them even fall ill with asthma and become consumptive. In addition, there are also the metallic fumes that marble, tufa, and stone emanate and that can harm the nose and brain. It is believed that those who work Lydian stone and the like are so badly affected in the head and stomach by the terrible smell that they constantly inhaling that it sometimes makes them vomit. When the bodies of such workers were dissected, it was observed that their lungs were full of tiny stones. What Diemerbrock has to say about stoncutters who died of asthma is of considerable interest. When he carried out the autopsies, he discovered their lungs were full of lumps of sand so that when he was cutting the pulmonary vesicles with a knife, he thought he was cutting a body of sand. In the same passage he describes a stonecutter who had told him that when he was working the stone, a dust arose that was so fine it would even penetrate the ox-bladders hanging in the workshop, and within one year he found a handful of this dust in one of them; the stonecutter believed that this would gradually cause the death of those who did not take sufficient precautions.

Medical case histories also describe stones found in the stomachs and intestines of these workers. The only possible explanation is that once these tiny dust particles are swallowed, they gradually accumulate. There is more on the subject in Olaus Borrichius'
De generatione lapidum in microcosmo. The formation of stones in our bodies is not always to be attributed to internal causes or the sedimentation of liquids. At times, the causes may be external. Wedel had occasion to observe the development of a stone that arose from external causes in a lime-mortar maid-servant. Wedel believed that the stone found in the lung had been formed by the lime particles ingested via the mouth.

The testimony of butchers who have frequently found stones in oxen’s stomachs and intestines refutes Aristotle’s opinion, who believes that only man and no other animal is afflicted by stones, unless he was only referring to kidney stones. Scaliger observed the very same phenomenon in horses. He says a horse voided some extremely hard tophi, one of which he kept. Many eminent scholars have written about the stones called “hippoliths” and their characteristics. However, these stones are probably formed in the stomachs of oxen and horses because, since they draw carts along stony and dusty tracks in the summer months, with their tongues hanging out because of the heat, they inevitably swallow dust and stone chips.

The most effective remedies for these workers are purges and emetics, as they expel the dust particles that have accumulated in the stomach and intestine and which could become much bigger ones with the addition of other particles. As far as possible, they should try to avoid these minute particles entering their mouths.
I have often had occasion to visit laundresses afflicted with various illnesses that caused by their trade. Since they spend most of their time in damp places with wet feet and hands, these women become cachectic and, if they continue this profession in their old age, they suffer from dropsy; I have seen not a few in this state. Laundresses also have decreased menses, thus leading to numerous kinds of illnesses, which is not at all surprising. Indeed, women who walk barefoot or wash their feet and legs with cold water during their menstrual cycle often find menstruation suddenly ceases. This is all the more the case for laundresses who have to spend hours in contact with water to earn their living and who always live in damp places; their bodies are always covered with moisture, the pores of their skin become obstructed, evaporation and transpiration diminish and the whole of the blood mass becomes blocked from thickened fluid. This leads to cachexia, amenorrhoea and supervening illnesses.

Laundresses also suffer from other ailments. They are afflicted by the vapours of boiling lye which they sometimes add lime to instead of ashes so that first they contract cough and, later, dyspnoea. In Bonet, Gregor Horst describes a servant girl who, after inhaling the vapours from a cauldron full of lye while she was bending over it to wash linen, was overcome by a terrible tightening of the chest that continued relentlessly for seven years until finally she died of suffocation. When the corpse was dissected, they found the lungs lividous and black fleshy excrescences in the bronchia that obstructed the passage of the air. The fumes of lye that the laundresses cannot but inhale therefore alter the lung structure, drying it out and making it incapable of carrying its proper function.
In addition, since they also wash the linen and clothes sullied with a myriad of contaminations, for example from persons with scabous skin disease, the French lues or from menstruating women, these workers inhale through the mouth or nose all kinds of terrible vapours, thus corrupting the brain and the animal spirits. Furthermore, because of the cracks in their hands caused by the irritation of the lye, inflammation and fever often arise.

Medicine should be thankful to these women because they encourage hygiene and every effort must be made to protect them from all of these illnesses. I usually recommend that once they have finished their work, they remove their wet garments and put on dry clothes, as this is something to which they pay too little heed. They should rub themselves, as much as possible should avert their faces from the boiling lye fumes, should frequently grease their hands with rose oil and butter, and should also avoid fatty foods and other errors in their diet. However, should they be forced to take to the sick beds, such as with a fever or catarrh, they should be given strong purgatives that will expel both the thick humours; antimonials are also of use if the illness is not too serious; remedies that remove obstructions and revive their natural heat should be given, as is the case for those with cachexia.
Diseases of dressers of flax, hemp and silk noil

Clothing is as essential as food, dating back to the primordial world when our forefathers fell from grace and first felt the need to cover their nakedness. Nature supplied them with a wealth of products to protect their bodies from injurious atmospheres - wool, flax, hemp, and cotton, to which one can add silk, although we could surely do without it, since it was invented more to adorn the bodies of men and women rather than to cover them. These are the materials used to make clothes, and those who do so are subject to a great many hardships. It is well-known how noxious the maceration of flax and hemp can be in the autumn, when one can smell the harmful odour from afar which can cause serious ailments. Workers involved in the heckling of flax and hemp, which is done before it can be spun and woven, are badly vexed. For these workers are exposed to a bitter, noxious dust evolved by these materials that once it penetrates the throat and lungs via the mouth, induces constant coughing that then leads to asthma.

At the beginning of winter many hecklers of hemp typically come from the parts of France nearest to the Italian borders to work on both sides of the River Po, because our workers are still unfamiliar with this craft. One sees them always covered in hemp dust, with pallid faces, coughing, asthmatic and bleary-eyed. They mostly work in winter and in confined spaces to protect themselves from the cold. While they are combing the hemp that has been well-smereed with grease, they cannot but help inhaling those noxious particles that corrupt the spirits and obstruct the respiratory organs, thus leading to serious illness. Since hemp and flax are macerated in stagnant, putrid waters, covered first with mud and submerged in the water to make the maceration quicker, the par-
ticles the hecklers breathe are poisonous and utterly antagonistic to human nature. According to the workers, flax heckling is more harmful than that of hemp, perhaps because its dust is even finer and it therefore enters the respiratory organs more easily, the latter becoming irritated as they try to expel them.

The dressers of silk noil are even worse off; these waste residues are used to make a thread this is put to various uses by townspeople, since it is cheaper than silk. The women leave the silkworm cocoons to macerate in hot water (this task is entrusted only to women, almost as if nature provided silk for their benefit alone); these are then drawn into fine threads and wound on reels. What is left from this procedure are coarse filaments admixed with a component of silkworm remains; these are then formed in noils and dried in the sun before being given to the workers to dress them into threads with very fine combs. Those who dress the noil usually have terrible cough and great respiratory difficulty. Very few of those who continue this work live to old age. The virulence in manipulating this material lies in the fragments of silkworm remains mixed in with the noil. This tiny insect feeds on mulberry leaves when alive, and, if its excrement remains in a heap somewhere for days until it putrefies, when disturbed it gives off a most terrible smell that pervades the entire surrounding neighbourhood. In some cities edicts were therefore issued forbidding that such excrement be thrown on to the streets and making it compulsory for it to be taken outside the city walls.

This insect, like many others the same ilk such as brukes and caterpillars that, like silkworms, can devour entire woods and wrap themselves inside cocoons, possess some kind of harmful substance with a corrosive property that harms the lungs in particular. I met an entire family in this city who had made a considerable fortune in the art of silk, all of whom died a wretched death through consumption; employed continuously in this trade, doctors held this responsible for their end.

First and foremost, I usually recommend a milk diet to these workers because there is nothing better at allaying these corrosive and ulcerating substances. Broth made of boiled mallow, violets, and endive, or purified extracts of the same, should be recommended. Should these workers sense that they are being seriously threatened, then they should seek a living elsewhere, because financial gain is worthless if it means losing that which is most precious, one's health.
Diseases that afflict those working in public baths

Of all the great public buildings that Rome was renowned for, the most outstanding were the public baths. Today their dimensions can still be reconstructed from the ruins and half-buried remains. Baths that were built without heeding cost were not only to be found in Rome, but also in other cities, in private homes, and even country villas. Their excesses were such that Seneca, that strict censor of morals, criticized this lavishness of the wealthy Romans and wrote “Anyone who did not have walls gleaming with large costly mirrors, Alexandrian marbles inlaid with mosaics from North Africa, vaulted ceilings hidden under glass, and water gushing from silver faucets, was considered poor and wretched”. Public baths are no longer the fashion and, if we did not have accounts of the history of public baths in Andrea Baccio’s renowned work De thermis, in Mercurial’s Gymnastica, or Sigonio’s De jure antiquorum romanorum, we would not know anything about their architecture or that doctors would prescribe using public baths, and a great many other things that are worth knowing. Public baths were therefore built by emperors for the people and there used to be one in every city district so that men and women could wash themselves whenever they wanted, which was every day, for next to nothing. Indeed, as Juvenal would say, everyone could “wash themselves for a trifle”, and children for nothing, as we learn from the former: “Not even children believe it, except those who pay nothing for their bath”.

A huge number of slaves of both sexes would work in the public baths non-stop, day and night, and were called “bath men” or “water-boys”. These workers would spend many hours a day in the water, washing the bathers in the different baths - hot, lukewarm, or cold, washing off their sweat and dirt, applying ointments, and
while steeping, having hair removed; thus these “water-boys” would be afflicted by various diseases such as cachexia, swollen legs, ulcers, oedema and anasarca. From a verse by Lucilius we can see what kinds of tasks these slaves had to do while looking after the bathers: “I am being scraped, plucked, peeled, and powdered, my hair done, shaved and painted”.

The ancient custom of public baths fell into disuse long ago, either because gymnastics became obsolete (and the baths appear to have been built with this very function in mind), or because, as some people believe, the ancients did not use shirts or underwear of linen but only woollen garments, so they had to wash themselves more frequently. However, in Rome and other crowded cities we can still see some vestiges of public baths for the sick, and some people still visit them in the summer to take a freshwater bath for their own beautification and cleanliness. Today, those who are afflicted by cutaneous infections such as scabiform or scaling conditions or syphilis visit these baths and saunas where they are washed with lukewarm water; very often tiny cupping-glasses are applied, scarifying their entire bodies with a liberal amount of blood letting and thus, once they have been washed, scoured, and sliced to pieces, they are sent back home. All too often, both the sick and those employed in the baths do not tend to seek out a doctor’s advice as to whether this is a suitable cure or not. Whether this is done well, only they can tell. I have often had occasion to see persons with these illnesses who have endured similar treatment of their own accord, and their condition is often extremely serious, because too much blood has been let. They were almost at death’s door because they had lost up to three or four pounds of blood. Some people still claim that such blood is of a poorer quality than that taken from the larger veins, as if the blood drawn from the cupping-glasses were no longer as red in colour (since the capillary arterioles are also cut) as that taken from a vein which always appears much darker. As far as I have been able to observe, those working in public baths are pale, sallow, mildly swollen, cachectic, and at times are afflicted by the very illnesses they are trying to treat in others.

I do not want to repeat what I have already said as regards cachexia and the like. I believe I would do better merely by indicating the illnesses to which these workers may be afflicted because
of their profession. When I first began writing this work, I did not intend to study all illnesses and their treatments in order to compile a complete treatise, but rather to provide physicians a few recommendations that are indispensable in treating these workers more successfully.
Chapter XXIX

Diseases of those employed in salt-works

Pliny once wrote with great wisdom that there is nothing more useful than the sun and salt. One could also add that nothing is more indispensable. Foreseeing that salt would be indispensable to mankind, when the world was created either Nature or God created the sea, that true store of salt, so that water would be transported via underground canals even to mountain peaks, where wells and springs of salt water could gush forth. In this manner, underground salt naturally occurs in various places, since it forms as a result of spontaneous concreations along such subterranean waterways, or it can be supposed that that when He created the world, God also arranged for salt mountains. Manufactured salt, which is used more commonly, is obtained from seawater that through tides fills pits and low-lying areas and dried out in summer by the hot sun, leaving behind copious amount of salt.

Most of the artificial salt used in this area and throughout nearly all of Italy comes from Cervia, a city on the coast of the Adriatic that once fell under the ecclesiastical authority of Ravenna. I would have loved to visit that city, but I have been unable to owing to other commitments. I therefore set about finding the information I sought through correspondence. In this, the illustrious professor of medicine, Doctor Lanzoni from Ferrara, was of great assistance. Unfortunately, his letters did not reach me in time to be able to add this subject to the chapter on the diseases of workers who process minerals. From the letters written by this doctor, who practises in Cervia, I have learned that in that city and its salt-fields the air is so saturated with a corrosive quality that iron gradually becomes as soft as wax and crumbles to dust. I have also learned that the workers nearly all suffer from cachexia, dropsy, and foul sores on
their legs. They are voracious for food and drink and are never satiated; hence mean of these workers die a sudden death. He goes on to say that these workers are treated in various ways and that each doctor, of which there has been a succession, has his own remedies. Finally, he says that there are few remedies that can be applied, at least in the more serious cases, always accompanied by drowsiness. This is as a result of the abundance of salt, literally of the salt mountains as Friar Landro Alberti calls them in amazement when describing that city. It is possible that such a vast amount of spirit, of salt evaporates into the air such that it becomes saturated. This acid must be so corrosive that it eats away iron and produces great acidity of the blood in the workers, which otherwise is meant to be sweet and healthy. This results in the cachexia, dropsy, and leg ulcers that by their very nature are promoted by from the warmth of excess acid.

The cause of such great appetite and edacity, almost as if labouring under bulimia, may lie in none other than the acid spirit of salt that stimulates the fermentation of the stomach. As Hippocrates wrote in his *Aphorism*; the ancients also knew that “canine hunger”, which can be cured with wine, is caused by the excessive quantity of acid that is formed in the stomach; hence was recommended abundant, undiluted wine, fatty foods, and anything else containing a lot of oil. This is what Galen writes in his notes on Hippocrates' writings – it is because these elements mitigate and dulcify (sweeten, but also for an acid, neutralize) the acid fermentation of the stomach, in the same way that acid spirits are dulcified with the spirit of wine. Their excessive intake of fluids may be attributed to the saline vapours or to the accumulation of serous fluids that, at certain point, turns into dropsy, a characteristic of which is constant thirst.

I am not completely certain whether such serious illnesses are caused by the saline spirit the workers inspire, or whether there are also other causes such as unhealthy air, for which Cervia is renowned. From the report I was given I have learned that there are almost no inhabitants left in that city and, as a result, it has been granted a special Pontifical privilege, stating that exiles from any other place shall find sanctuary there; in addition, debtors who settle in Cervia will no longer have to pay their debts, although they are thus forced to pay their final debt to nature itself. Since workers
in other places where salt is produced do not suffer such serious ailments, we cannot blame the vapours of acid spirit alone. The city of Venice, the Queen of the Adriatic, is densely populated and although it is surrounded on all sides by sea vapours, yet the air there is clean and healthy. For more on this subject one should read the commendable work by the renowned Venetian physician, Lodovico Testi. In the region around Piacenza, there are wells of salt water and salt is extracted from these by boiling; a certain amount of ox-blood is then added to reduce it to granules. As far as I know, there are a great many workers there (since salt production is one of the greatest sources of the ducal treasury) and they are not afflicted by any serious ailments.

It is very likely that salt production is extremely arduous and leads to such serious illnesses, not just because of the substances involved, but also because of the actual fatigue they endure. In his detailed treatise on the subject, Georgius Agricola not only describes the various methods used to boil salt water and to artifices to divert water into salt fields, drawing together sea water into such area but also tells us to which risks these workers are exposed. He says the heat in the workshops is so great that, other than wearing a straw hat on the head and loincloth to cover the genitals, they are naked. Thus, as well as being exposed to other risks, they also have to endure the blaze of the fire and the summer heat.

This must be extremely harmful to the workers' health. I have observed that in the rooms where the salt from Cervia is stored before being distributed throughout the Duchy of Este, the walls are partially corroded and there are great cracks between the bricks. This phenomenon is to be attributed to the corrosive spirit of sea salt that attacks the alkali in lime in particular, which becomes saturated with it. When salt is made in Piacenza, this is what happens when salt is mixed with ox-blood or ox-gall; the salt acid absorbs the alkali from the blood and results in granulation. Thus those employed in public places where salt is sold are usually pale and sickly.

The condition of these workers is therefore deplorable. In Italy at least, salt is produced along the coast where the sea water overflows into confined pits and salt-pans and thus pollutes the air. It is not easy to find doctors willing to practise in such places and these wretched workers, who are often afflicted by serious illnesses, either die very quickly without being treated or they are consumed
by a lengthy illness. It is to be hoped that any doctors carrying out their practice in such areas will show the greatest caution when treating these workers, in particular when recommending blood-letting. Because since their blood has already been corrupted by the saline vapours and is almost putrescent, it is likely they will collapse when bled and the illness will take a turn for the worse. To be recommended are purgatives that are strong enough to draw out that accumulation of serous impurities and correct the acid diathesis of the humours through the alkalis that abound in nearly all purgatives. Also to be recommended is full-bodied wine, spices, and anything containing volatile salts such as chewing tobacco and boiled tobacco leaf teas; in short, anything that is able to blunt the acidity of the blood. The most common method used to dulcify the spirit of salt, that is, with rectified spirit of wine, will be a guide that is as infallible as the canon of Polycleitos when deciding which remedy should be used to treat these workers.
Diseases afflicting those who work standing-up

Up until now we have looked at workers who are afflicted by illnesses caused by the substances that they use. We shall now look at those whose illnesses have other causes, such as the morbid effects later arising from the posture of the limbs or inharmonious movement of the body. Anyone who spends the whole day standing, sitting, stooped, bent over, running, riding, or taxing their muscles in any other kind of way, all belong in this category. First to consider are those who work standing: carpenters, planers, sawyers, sculptors, blacksmiths, masons, and others I shall not name, otherwise the list will become too long. The ailment those who work standing are most afflicted by is varicose veins, since contraction of the muscles impedes the flow and reflux of blood so that it stagnates in the veins and valves of the legs, leading to the swelling we call varices. Just to what extent muscle tension can impede the natural flow of the blood can be easily seen in oneself; if you stretch out your arm and then feel your pulse, it is much weaker. When the leg and loin muscles are contracted, the lower arteries are compressed and can no longer push the blood forward; the opposite is the case when walking because the muscles stretch and contract in alternation. Therefore, when one is standing, the blood returning from the arteries to the veins no longer has the strength it needs to move upwards and, without any impulse from below, it stagnates and leads to varices in the legs. Thus, in his writings about a haruspex (since this the sort of man who stands for long periods studying animal viscera) Juvenal says: "A haruspex may suffer from varicosities".

As we know from the learned Mercurial, in his work Gymnastica, in the past standing immobile so as not to be moved was once a common drill for Roman soldiers; he puts forward the plausible
conjecture that Ciaus Marius suffered from varicose veins because he would remain on his feet during battles, as was deemed fitting for any valiant general. In fact, according to Suetonius, Vespasian used to say that an emperor ought to die on his feet. Thus, Ciaus Marius was so used to standing, that he had his varicose veins excised from one leg while standing on the other. Virgil describes Aeneas standing while the physician Iapis endeavoured to extract the arrow from his wound: "Aeneas stood trembling with rage, leaning on his huge spear".

Aulus Gellius gives us an amazing description of Socrates. "It is said that he would stand in one fixed position, all day and all night, from early dawn until the next sunrise, open-eyed, motionless in his very tracks and with face and eyes riveted to the same spot in deep meditation, as if his mind and soul had been, as it were, withdrawn from his body".

Any trades that require one to remain standing can cause ulcerated legs, a weakening of the joints, painful kidney afflictions, and bloody urine. I have met a considerable number of servants at the courts of princes (as well as noblemen, for example at the court of the King of Spain where there are no chairs) who would complain of pains in their kidney, blaming it on nothing other than always being on their feet. And they are quite right, since if the body remains upright in the same position, it is inevitable that the lumbar muscle fibres remain under tension and this affects the kidneys, since the blood cannot follow its natural flow or separate the serum from the blood. This is the cause of the aforementioned illnesses.

A life of standing is accompanied by a weak stomach; indeed, the stomach of those who stand upright obviously tends to sag downwards, unlike those who sit with their body bent forward and whose stomachs rests on the intestine. Hence, when we have some stomach ailment, this might be why we bend our whole body forwards and draw up our knees and legs. The learned Bacon observed that although they had to endure considerable hardship, galley-slaves are well-built and robust, because they row sitting down and use their limbs more than their abdomen and stomach. The same can be observed in weavers who exercise their hands and feet at the same time. When the peripheral parts of the body are moved while centrally quiescent, one grows more fat and robust than when standing and walking, the latter being movements that fatigue more easily.
The reason why standing, even for shorter periods of time, is more tiring than walking and running, even for longer periods, deserves to be looked at more closely. It is generally believed that this is because all the antagonistic muscles, whether flexors or extensors, are in a state of tension to keep the body in an erect position. This theory is rebutted by the learned Borelli. He believes that when the arm is stretched out, the flexors play no role but the extensors do, and the same thing occurs when a person is upright and the flexors are relaxed and it is only the extensors that are working. This discerning writer believes that the reason standing causes fatigue is due to the constant contraction of the same muscles. Alternating movement with rest is more congenial, he states. In fact, walking does not result in much fatigue and those who are standing tire themselves less if they alternate their weight-bearing leg. This natural need can also be seen in animals, for example chickens that sometimes stand on just one foot and hold the other one up; the same can be seen in quadrupeds, for example donkeys sometimes put one of their back hooves in the stirrup if they have to remain standing still.

This alternation is not only to be recommended for movements, but also for nearly all bodily functions. If we stare at an object, if we hear a constant sound, if we see the same food on the table, or if we smell the same odours, we feel annoyed; while variety and change is more agreeable by its nature. After being fed with manna from heaven, the Israelites in the desert longed for the onions and garlic of Egypt, and, as Horace says, “We laugh at one who always plays the same wrong note”.

Those employed in professions that require them to stand must therefore be advised to interrupt their work when they can, either sitting down for a while, going for a walk, or doing some other kind of movement. Remedies for fatigue and to restore the tone of their limbs will be beneficial, for example, wet rubs, fomentation, and baths. The authors on medical practice who have written about varices, ulcers, kidney ailments, and hernias should be consulted for the treatment of these illnesses. I have no intention of prescribing the particular cures for these diseases, as this would be simply repeating what has already been said. I would simply like to inform practising physicians of the ailments workers are exposed to.
Diseases that afflict sedentary workers

Those who do sedentary work, on that account called "couch craftsmen", such as shoemakers and tailors, are afflicted by their own particular diseases. Cobbblers are those who stitch shoes and this is why Martial turned to his muse and said of a shoemaker who had become so wealthy he underwrote a gladiatorial show for the public, "Break your delicate quill and rip up the sheets, Thalia, since a shoe can give all that to a cobbler".

Tailors are those who stitch garments and both categories of these workers and anyone, whether male or female, who does any kind of sedentary work, becomes bent, hunchbacked and holds their head down as if searching for something. But this posture is caused by their sedentary life, rather than a true hunchback state. In actual fact, their shoulders are round-shouldered like monkeys and the vertebrae of their backs are evenly curved. Since they bend over while doing their tasks, they cannot avoid contraction of the ligaments of the vertebra, which curve towards the outside, such that certain callousness forms, making it impossible for them to return to their natural position. Wedel observed this condition in an elderly shoemaker and says it could not be cured, since it had been neglected in his youth.

Since tailors have almost no choice but to keep one leg across the other when they are sewing garments, they often have numb legs, limp, and suffer from sciatica. This is why Plautus says: "He is up all night, then during the day he sits at home all day like a lame cobbler, day after day".

It is a comic sight when one sees tailors and shoemakers on their special feast-days marching through the city in pairs in procession, or when they are accompanying one of the members of their guild.
to his tomb. It makes one laugh to see a group of hunchbacked, stooping, limping men who sway from one side to the other, as if they had all been carefully chosen for such a performance.

Sedentary workers are usually also scabbed, pale and in poor shape; this applies to tailors and women in particular who do needlework at home day and night to earn their living. These illnesses are caused by lack of exercise; indeed, the blood becomes impaired if the body does not move, waste matter remaining within the skin and the condition of the entire body deteriorates. These workers also have loose bowels compared to those who do physical exercise; their faeces are scant, yellow, and hard, as we can learn from Hippocrates. He documents the case of Cleotimos, a cobbler, “Who suffered for a long time from liquid stools and fever due to a tuberculous tumour that had spread from the liver down to the lower abdomen”. Hippocrates also describes another shoemaker who lay sick in his workshop and had a nose-bleed followed by moderate stooling.

Sedentary workers, and shoemakers in particular, therefore suffer from ill-health and an excessive accumulation of morbid humours. This is not the case with other workers, such as potters and weavers who also work sitting down, because they use their arms, feet and their whole body. That is why they are healthier, since these movements help to dissipate impurities from the blood. All sedentary workers are afflicted by loin pain Plautus' saying is famous: “Sitting hurts your loins, staring, your eyes”.

I do not know what remedies one can recommend these workers to stop them from falling ill, when the causes of the ailments cannot be removed and they have no choice but to work to provide daily sustenance to their families. However, purgatives in spring and autumn will stop an excessive amount of dense humours accumulating and will therefore reduce the seriousness of the illnesses. They should be encouraged to do physical exercise, at least on holidays, so they can somehow compensate the damage caused by remaining in a seated position for the greatest part of their lives. If they are then forced to take to their beds because of the above-mentioned illnesses, remedies need to be recommended that evacuate the humours and pay particular attention to the parts of their bodies that are most afflicted by their work, for disease easily moves to such sites. Here it is appropriate to recall the passage wherein Hippocrates describes two “who worked with their hands”,

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one of whom twisted twigs. Both were afflicted by terrible coughs and "They were cured when the right hand became palsied". He adds that "those who rode or walked were subject to paralysis of the loins and legs. This is because it is much easier for the humours to become confluent at those parts of the body that have lost their strength and vigour because of over-exercise."